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AUTHOR Kelley, Edgar A.; And Others
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ABSTRACT

This study investigated teacher perceptions of the climate in 545 individually Guided Education (IGE) elementary schools, using the Organizational Climate Index as a research tool. The schools were categorized according to degree and length of implementation and according to location (rural, suburban, urban, and inner city). The following questions were investigated: Do significant differences exist in a teacher's perception of school climate in relation to degree of implementation? Do differences exist in a teacher's perception of school climate in relation to location? Do differences exist in relation to length of implementation? What differences exist in perceptions between teachers in IGE schools and non-IGE schools? Analysis revealed no significant difference in a teacher's perceptions of school climate when compared to high and low degrees of implementation. A significant increase in Development Press and a significant decrease in Control Press were found as the degree of implementation of IGE increased in rural and inner-city schools. A significantly lower perception of Control Press was found for teachers in the second year of the IGE model as compared with teachers in the first and third years. (The appendixes include information on instructional outcomes, scale and factor definitions, and sample schools. Seven tables of statistical data are presented.) (BRB)

# TEACHER PERCEPTIONS OF SCHOOL CLIMATE AND THE IMPLEMENTATION OF INDIVIDUALLY GUIDED EDUCATION (IGE)

Edgar A. Kelley
Fred H. Wood
Ronald Joekel



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TABLE OF CONTENT

LIST OF TABLES

# CHAPTER I

## INTRODUCTION TO THE STUDY

This report is divided into five chapters. Chapter I is organized into four sections: (1) Overview: introduction to Individually Guided Education (IGE) and a brief overview of all studies conducted as part of the /I/D/E/A/ grant to Teachers College, University of Nebraska, (2) Need for the Study: a statement of need, brief review of the related research and literature, and value of the study; (3) Purpose of the Study: a statement of purpose plus assumptions, definitions, and limitations of the study; and (4) Procedures: data analysis. Chapters II through IV report the major finding and conclusions of this climate study. Finally, Chapter V summarizes the study, indicates the implications of the findings, and makes recommendations for further research.

### Overview

Since the late 1960's, Individually Guided Education (IGE) has been sweeping the country's elementary schools. From its conception at the University of Wisconsin in 1966 through the involvement of the Institute for Development of Educational Activities (I/D/E/A) in the development of an implementation stretegy in 1969, the number of schools using the IGE Model has grown from thirteen in one state to over seven hundred in thirty-one states. This growth has made IGE the most frequently adopted change model for elementary education in the United States.

What is IGE? IGE is an approach to schooling that provides a framework for individualizing instruction. It also involves teachers in a systematic program of self-improvement through the development of the skills and understandings necessary to implement an individualized program. (See Appendix A for a detailed list of outcomes for IGE).

While the popularity of IGE can be attributed, in great part, to its emphasis on individualization, another reason for its rapid adoption seems to be its ability to encompass the best practices found in today's elementary schools. In fact, the IGE model makes use of such innovations as team teaching, differentiated staffing, multi-age grouping, and continuous progress curriculum. These and other practices are all part of the system defined by components of the IGE model. These components include (1) an instructional cycle, (2) a multi-unit organization, (3) home-school relations, and (4) league linkage.

Need for Evaluation. With the increase in the number of schools adopting the I/D/E/A change model, the requests for information about the impact of IGE on students, teachers, and parents have also increased. Educators, school board members, parents, and the lay public have all begun to ask for research data to support the commitment of expenditures--both human and financial--required when implementing the IGE model.

Evaluation is essential to any educational program, but especially for a change program like IGE that has been adopted so quickly by so many schools. In the past, educators have given relatively low priority to systematic assessment of innovative programs. This lack of attention to the collection and analysis of data has resulted in the elimination of a number of excellent programs, when sound research findings would have resulted in more appropriate decisions. Research data is needed to avoid similar mistakes when determining the fate of IGE schools. The need for answers to the questions coming from educators and school board members considering whether or not to adopt the IGE model is an even more crucial concern.

Evaluation of IGE. In response to the growing need for establishment of a data base for decision making regarding both the implementation and effects of IGE programs, I/D/E/A funded three grants to support research studies during the 1972-73 school year. One of these grants was awarded to Teachers College, University of Nebraska. This grant supported research in four broad areas: (1) the costs of implementing IGE, (2) the effects of IGE on student attitudes and self-concept, (3) the effects of IGE on school climate as perceived by teachers, and (4) the role of the IGE facilitators. Funds were also provided to identify instruments which measure student self-direction, learning how to learn skills, and problem solving skills and to develop a design for a study to measure the effect of IGE on these outcomes.

In the study being reported, teacher perceptions of school climate were collected and analyzed to identify the impact of implementation of the IGE Model on teacher perceptions. Data were organized and analyzed within three broad variables: (1) the degree of implementation of the IGE Model, (2) the length of time for which buildings had been involved in the IGE Model, and (3) the type of location in which the IGE schools are located--rural, suburban, urban, and inner city.

## Need for the Study

Educators, boards of education, and lay citizens in their consideration of whether or not to implement any innovative program will want to know the anticipated effects upon staff morale and staff attitudes. This concern is of even greater importance when we consider the probability that, as George Stern has noted, the climate perceived by teachers is transmitted to the classroom and to the students in the building where the teachers work (Stern, 1970)

Since the teacher perceptions of school climate will form and be modified prior to observable changes in pupils, one approach to the study of the effects of a change in program is the analysis of teacher perceptions of school climate. While climate factors are idiosyncratic to each building, the systematic study of general categories of teachers can provide a normative base for predicting the effects of implementation or continuance of a program model. In planning a study of teacher perceptions of building climate in IGE schools, the following questions were posed: (1) As the degree of implementation of the IGE model increases, are significant changes in teacher perceptions of school climate likely to occur? (2) Does the type of community or degree of urbanization in the community where an IGE school is located have a predictable impact upon teacher perceptions of building climate or probable changes in teacher perceptions of building climate? (3) Does the length of time which has passed since the start of implementation have a predictable effect on teacher perceptions of school climate in IGE schools? (4) To what extent, if any, do teacher perceptions of school climate in IGE schools differ from teacher perceptions of school climate in selected control schools?

The careful study and prediction of teacher perceptions of school climate can have, for educational planners, numerous outcomes. In direct relation to decisions related to the issue of whether or not to implement or continue the IGE Model, climate data can be used to: (1) identify buildings where the IGE Model may be most successfully implemented: (2) identify buildings where the implementation of the IGE model will require special leadership and guidance from league facilitators or building administrators; and (3) identify settings where the IGE Model is not leading to desired climate outcomes. Improved planning for the maximization of organizational goals while concurrently providing for the satisfaction of human needs should be the result of careful studies of building

climate. As Mitchell (1970) has commented:

> Everyone suffers from inadequate, inappropriate, or non-fulfilling environments, and everyone stands to gain from their improvement. To study these environments, their interaction with human needs, and their effects on behavior would seem to be the sine qua non of intelligent and responsible educational leadership.

Climate. The concept of climate has evolved during the past twenty years as a result of the growing realization that the interaction of people with an environment is a two-way process and is shaped by both the environment and the psychological characteristics of individuals. Cornell (1955) first used the term "organizational climate" and defined the concept as being "a delicate blending of interpretations by persons in the organization of their jobs or roles in relationship to others and their interpretations of the roles of others in the organization."

As the concept of climate has evolved, it has gradually replaced the older concept of "morale" and is a more inclusive concept which characterizes the psychological environment or "living system" of an organization or group (Kelley, 1970). In usage, the term has been interchangeable with "tone," "atmosphere," and "personality" (Owens, 1970). Essentially, as Halpin (1966) has noted, "personality is to the individual what organizational climate is to the organization."

At the present time, there is general agreement that climate studies should be based on the following assumptions: (1) there is no single or specific optimum climate which should be identified or sought by every organization or group, (2) data generated from climate studies are useful only as a mean of permitting the organization or group to better identify and focus upon future thrusts of the organization.

The two most widely known tools for the assessment of teacher perceptions of climate are Halpin's Organizational Climate Description Questionnaire (OCDQ) and Stern's Organizational Climate Index (OCI). The OCDQ was developed for use

in measuring teacher satisfaction with teacher-principal interaction in elementary school settings; the OCI, a more fully developed instrument, was designed for the measurement of organizational climate in any type of organization or setting (Owens, 1970; Stern, 1970; Kelley, 1970).

In the present study, the Organizational Climate Index (OCI) was selected as the research instrument for use in the collection of data about teacher perceptions of climate in IGE schools. The data output of the OCI reports findings on thirty scales, six first-order factors, and two second-order factors. The two second-order factors of Development Press and Control Press provide information about the extent to which the environment of the school is perceived as fostering the development of the staff member and/or being concerned with the authoritarian control of events occurring within the school. From this basic dichotomy, the six first-order factors provide clustered information about the extent to which the school is concerned with individual development or with the maintenance of control. Each of the thirty scales provide information about component parts of the first-order factors. Most studies which have utilized the OCI or other instruments created by the Psychological Research Center at Syracuse University show that as the emphasis on development of the individual increases, there is a decline in the extent to which the factors or scales reflect a concern with the maintenance of control. All of the scales and factors of the OCI are fully defined in Appendix B. The basic dichotomy provided by the two second-order factors of the OCI is conceptually similar to the Open-Closed continuum described by Halpin's Organizational Climate Description Questionnaire (OCDQ). The OCI, however, produces more in the way of explanatory information about the climate of a building than does the OCDQ.

## Purpose of the Study

This study was undertaken to investigate four major questions regarding teacher perceptions of climate in IGE schools. The Organizational Climate Index was used as the research tool. The four questions which were investigated were:

1. If schools are categorized on the basis of the degree of implementation of the IGE Model, and if a forced dichotomy between upper and lower quartiles on the degree of implementation is created, are there significant differences in the teacher's perceptions of school climate between High and Low implementing schools? between High implementors and National norms for OCI climate? between Low implementors and National norms for OCI Climate?

2. If the location of IGE schools is categorized into four classifications--rural, suburban, urban, and inner city--are there differences in teacher perceptions of school climate which are attributable to the location (type of community) where the school is situated?

3. Are there significant differences in teacher perceptions of school climate in IGE schools which are identifiable as a result of the length of time which has passed since the IGE Model was implemented?

4. To what extent do teacher perceptions of school climate in IGE schools differ from teacher perceptions of school climate in selected control schools?

Assumptions. Certain basic assumptions were inherent in the conducting of this study. Many of these assumptions are inherent in the entire field of climate assessment. The assumptions which were made were:

1. Teacher perceptions of school climate, as measured by the Organizational Climate Index, represent a measure of teacher behaviors or teacher predispositions to behaviors which would be observable in the settings being measured and described.

2. The climate of a building, as measured by teacher perceptions of school climate, is transmitted by teachers to the students with whom they work.

3. Teacher perceptions of school climate after one, two and, three years of implementating the IGE model are, when considered in comparison to varying lengths of time since implementation, an accurate measure of the developmental pattern which occurs in teacher perceptions of school climate as the IGE Model is implemented.

4. Teacher perceptions of school climate based on the type of community in which IGE schools are located are, in comparison with teacher perceptions of IGE schools located in differing types of community locations, an accurate measure of differences in both the impact of community location on teacher behaviors and the probable success of the IGE Model in differing types of school-communities.

5. IGE schools classified as rural, urban, inner-city, and suburban by league facilitators are representive of the schools in their respective categories.

6. Categorization of IGE schools by /I/D/E/A/ self assessment data for the degree of implementation are an accurate reflection of the extent to which a school or group of schools have implemented the IGE Model.

7. Teacher perceptions of school climate measure where an organization "is" rather than whether the organization is doing a "good" or "bad" job; there is no single, optimum environment and data results are useful only when compared to intended or desired outcomes as measured by the scales and factors of the Organizational Climate Index.

Limitations. This study has a number of limitations which should be kept in mind in any interpretation of the findings. On the other hand, a number of limitations have been avoided through the design of the study and the selection of the research instrument used. The study is limited by the following:

1. The lack of any school in the population that had fully implemented all thirty-five outcomes which define IGE. This is a major limitation of this study.

2. There were only six schools in their third year of IGE in the total population. In addition, these six schools did not experience the same (/I/D/E/A/) implementation strategy or have the same inservice materials available to the first and second year schools in the population, at least during their first year of implementation.

3. The lack of longitudinal data which would support the assumption that the teacher perceptions of school climate in schools with varying length of implementation experiences with the IGE model are, at the point of measurement, providing an accurate reflection of climate outcomes

which are attributable to the length of time the model has been in use within a building.

4. The lack of an established norm for teacher perceptions of school climate which would represent the program goals of the IGE model.

5. The lack of established national norms which would permit comparison of results obtained when schools are categorized or classified by the type of community (degree of urbanization) in which they are located.

6. The use of a forced dichotomy based on reported degree of implementation of the IGE model as a means of highlighting differences in teacher perceptions of school climate which are attributable to the degree of implementation of the IGE Model.

Definitions The reporting of this study in an understandable fashion is dependent upon the reader's knowledge of a number of important definitions. In Appendix B, the thirty scales and eight first-order and second-order factors of the Organizational Climate Index are defined. In addition, the following terms require definition:

1. Climate: the perception of an individual of the organizational goals which are operating as related to his own psychological orientation within a situation.

2. /I/D/E/A/ : The Institute for the Development of Educational Cativities.

3. IGE: the Individually Guided Education program model as described by the thirty-five outcomes in Appendix A.

4. Implementation (High and Low): The Degree to which schools have implemented the IGE model as determined by self-assessment in November, 1972, by the staff in IGE schools. In the study groups were developed based on quartile ranges of implementation with the "High" group being the first quartile and the "Low" group being the fourth quartile.

## Procedures for Obtaining and Treating Data

Sources of the Data. All schools which were identified as being IGE schools by /I/D/E/A/ and completed the November, 1972, self-assessment formed the population of this study (N = 545). On the basis of the summery of the self-assessment data provided by /I/D/E/A/, all IGE schools were classified on the degree of implementation of the IGE Model (Upper quartile, Upper-Middle quartle, Lower-Middle quartile, and Lower quartile) and their community location.

Three separate samples were drawn as part of the climate study. In the first, sample schools were randomly drawn from the Upper and Lower implementation quartiles for each of the four categories of location (Rural, Suburban, Urban, and Inner-City). The design model used for selection of this sample is shown below:

| Location of School | Degree of Implementation As Measured by Existing /I/D/E/A/ Data | Number of Schools: Sample Size |
|---|---|---|
| RURAL | Upper Quartile | 5 |
| | Lower Quartile | 5 |
| SUBURBAN | Upper Quartile | 5 |
| | Lower Quartile | 5 |
| URBAN | Upper Quartile | 5 |
| | Lower Quartile | 5 |
| INNER CITY | Upper Quartile | 5 |
| | Lower Quartile | 5 |

The second sample consisted of five schools drawn at random from each of three length-of-time classifications: (1) schools involved in implementing the IGE Model for three years; (2) schools involved in implementing the IGE Model for two years; and (3) schools involved in implementing the IGE Model for one year.

A third sample of schools was identified to provide data for a comparison of school climate between IGE and Non-IGE schools. For this phase of the climate study, a total of eight IGE schools (2 Urban, 2 Suburban, and 3 Inner-City) and three control schools, one matched to the schools in each location category, were selected from three IGE leagues in a midwestern state. Facilitators from the three leagues worked with the researchers to identify, match, and obtain the cooperation of these schools. Due to the loss of two of the original control schools, three new control schools had to be obtained in another state. Although the match between the eight IGE schools and the new control schools were at least as good as the original controls, the difference in location lead the researchers to omit the results of this phase of the climate study from the body of this report.

Of the forty-five IGE schools selected for the first two phases of the study, only seven did not participate in the study. In the first sample, 80 percent of the Suburban and Rural schools, 90 percent of the Inner-City schools, and 100 percent of the Urban schools provided data on teachers perception of school climate. All of the first year schools and 80 percent of the second and third year schools provided data for the second phase of the study. Appendix C contains an alphabetical list of all IGE schools who participated in the study and the intermediate agencies which serve these schools.

Procedures for Collecting Data. The Organizational Climate Index (OCI) was selected as the research tool for use in collecting data about teacher perceptions

of school climate in the sample schools. The OCI contains 300 true-false questions which provide data output on thirty identifiable psychological climate scales reflecting the interactive perceptions operating within an organization factors (Intellectual Climate, Achievement Standards, Practicalness, Supportiveness, Orderliness, and Impulse Control). These thirty scales are capable of factor analysis into six first-order and two second-order factors (Development Press and Control Press). The scales and factors of the OCI measure the perceived intellectual and affective climate of the building or organization. The scales and factors of the OCI are defined in Appendix B.

After the schools to be included in the study were identified by the procedures which have been outlined above, /I/D/E/A/ advised their league facilitators by letter of the study and asked them to assist the researchers in collection of the data. Within ten days the researchers had contacted the facilitators with schools in the sample and asked them to notify building principals of the selected schools that their building would be involved in the study. Letters were then sent to the building principals outlining the study and the procedures to be used in the administration of the Organizational Climate Index to faculty members in the sample schools. Next, a package was sent to each building principal or league facilitator for use in the collection of data. The package included the OCI test booklets, answer sheets for use by faculty members in responding to the OCI, and a set of directions for use by the principal in the administration of the OCI. The directions sent are reproduced in Appendix D.

To facilitate the administration of the OCI and to impose as little as possible on the time available to teachers, each respondent completed only one-half of the OCI. The 300 questions of the OCI are arranged in a sequential order which reflects the 30 scales which provide the basic output format derived from the instrument. Thus, each teacher who completed one-half of the OCI completed

five of the ten questions which measure each of the thirty scales of the OCI. The teachers in each building were divided into two equal groups and each group completed a different half of the OCI; thus, the completed instruments from each sample school was equal to one-half the number of teachers actually employed in the building. The sample sizes reported in the findings of this study represent completed instruments and are, accordingly, only one-half as large as the number of teachers involved as participants in the collection of data.

When the teachers in each building had completed the OCI, the test booklets and completed answer sheets were returned to the investigators.

Treatment of the Data. After all data collection activities had been completed, the investigators organized the answer sheets into three packages for forwarding to the Psychological Research Center at Syracuse University for scoring and analysis. The facilities for scoring of the OCI at Syracuse University provided the basic data which is reported in the findings of this study; the data output included means, standard deviations, standard scores, and an analysis of variance with Scheffe tests for each of the comparisons of interest to this study.

The level of significance for this study was set at .01; however, tables throughout the study also indicate those items which were significant at the .05 level. The .05 level has been reported to provide the reader with additional data which might be helpful in determining the affects of the IGE Model on teacher perceptions of school climate.

## Summary

The purposes and procedures of this study have been outlined in this chapter. In the next three chapters, findings of the study are presented. The investigators recommend that the reader familiarize himself with Appendix B (the definition of the scales and factors of the OCI) before proceeding to the reading of Chapters II, III, and IV.

In Chapter V, a summary of the study and its findings is presented and conclusions about the effectiveness of the IGE Model in producing change in teacher perceptions of school climate are drawn. Recommendations are also presented for additional issues which, from the findings of this study, are in need of careful investigation as the implementation of the IGE Model continues in the existing schools where it has been initiated and in other schools which may adopt the IGE Model as a change strategy.

CHAPTER II

# VARIATIONS IN IMPLEMENTATION OF THE IGE MODEL AND TEACHER PERCEPTIONS OF BUILDING CLIMATE COMPARED TO NATIONAL NORMS

Self-assessment data obtained by /I/D/E/A/ in the fall of 1972 had resulted in scores which were accepted as representing the degree of implementation which schools had achieved in their adoption of the IGE Model. This categorization of the degree of implementation resulted in the following question which was posed for this study:

> If schools are categorized on the basis of the degree of implementation of the IGE Model, and if a forced dichotomy between upper and lower quartiles on the degree of implementation is created, are there significant differences in the teacher's perceptions of school climate between High and Low implementing schools? Between High implementors and national norms for school climate as measured by the OCI? Between Low implementors and national norms for school climate as measured by the OCI?

The Sample. Two hundred eighty (280) teachers from eighteen schools in the upper quartile of implementation and two hundred eighty-eight (288) teachers from eighteen schools in the lower quartile of implementation provided the data reported. Since the OCI was administered on a basis of each sampled teacher completing one-half of the instrument with a subsequent merging of test results, the final upper quartile N is 140 and the lower quartile N is 144. The buildings in which the OCI was administered were randomly selected from each of four location categories: rural, suburban, urban, and inner city. Twenty buildings were selected in each quartile. The OCI was administered to all teachers in the buildings selected. For each of the quartiles involved in the study, eighteen of twenty buildings (90% of the sample) completed the date collection and provided results which are reported.

Table I contains the data which were obtained for each of the comparisons of interest in relating the degree of implementation of the IGE Model to variations in teacher perceptions of building climate.

TABLE I

COMPARISON OF IGE SCHOOLS IN THE UPPER AND LOWER QUARTILES OF IMPLEMENTATION OF THE IGE MODEL OF USE OF STANDARD SCORES FOR TEACHER PERCEPTIONS OF BUILDING CLIMATE.

| | SCALE | UPPER QUARTILE N = 140 | LOWER QUARTILE N = 144 | DIFFERENCE |
|---|---|---|---|---|
| | | Standard Scores[1] | | |
| 1. | Abasement | .77342 | 1.21990 | - .44648 |
| 2. | Achievement | .72170 | - .46281 | 1.18451 |
| 3. | Adaptability | .99469 | - .38383 | 1.37852 |
| 4. | Affiliation | .64223 | - .57199 | 1.21422 |
| 5. | Aggression | .85762 | 1.70474 | - .84712 |
| 6. | Change | 1.35664 | 1.21565 | .14099 |
| 7. | Conjunctivity | - .11077 | - 1.13810 | 1.02733 |
| 8. | Counteraction | .25507 | - .63670 | .89177 |
| 9. | Deference | - .47987 | - .73517 | .25530 |
| 10. | Dominance | 1.35687 | 2.04150* | - .68463 |
| 11. | Ego Achievement | 1.17226 | - .18944 | 1.36170 |
| 12. | Emotionality | 1.85984 | 1.17433 | .68551 |
| 13. | Energy | 1.22091 | - .41647 | 1.63738 |
| 14. | Exhibitionism | 1.66339 | .58523 | 1.07816 |
| 15. | Fantasied Achievement | 1.03498 | .28998 | .74500 |
| 16. | Harm Avoidance | -1.02916 | - 1.43875 | .40959 |
| 17. | Humanities | - .53190 | - 1.74908 | 1.21718 |
| 18. | Impulsiveness | 1.20455 | 1.37416 | - .16961 |
| 19. | Narcissism | - .45546 | - 1.13305 | .67759 |
| 20. | Nurturance | -1.20334 | - 2.29156* | 1.08822 |
| 21. | Objectivity | - .44544 | - 1.62867 | 1.18323 |
| 22. | Order | - .93441 | - 1.24415 | .30974 |
| 23. | Play | .86118 | 1.27283 | - .41165 |
| 24. | Practicalness | .36853 | .08322 | .28531 |
| 25. | Reflectiveness | .61625 | - .86376 | 1.48001 |
| 26. | Science | - .04061 | - 1.23714 | 1.19653 |
| 27. | Sensuality | .86406 | - .55039 | 1.41445 |
| 28. | Sexuality | 1.19814 | 1.11619 | .08195 |
| 29. | Supplication | .44452 | - .29811 | .74263 |
| 30. | Understanding | .33334 | - 1.51191 | 1.84525 |

[1]Standard scores shown are based on national norms with mean = 0, sigma = 1.

*Significantly different than national norms with a standard score 1.96000 or greater significant at the .05 level.

**Significantly different than national norms with a standard score 2.57500 or greater significant at the .01 level.

TABLE I (CONTINUED)

COMPARISON OF IGE SCHOOLS IN THE UPPER AND LOWER QUARTILES OF IMPLEMENTATION OF THE AGE MODEL BY USE OF STANDARD SCORES FOR TEACHER PERCEPTIONS OF BUILDING CLIMATE.

| SCALE | UPPER QUARTILE N = 140 | LOWER QUARTILE N = 144 | DIFFERENCE |
|---|---|---|---|
| | | Standard Scores[1] | |
| First-Order Factors: | | | |
| 1. Intellectual Climate | .9708 | - .5451 | 1.5160 |
| 2. Achievement Standards | 1.4200 | - .1516 | 1.5716 |
| 3. Practicalness | - .8737 | - 2.0306* | 1.1569 |
| 4. Supportiveness | - .6120 | - 1.6999 | 1.0879 |
| 5. Orderliness | - .3412 | - 1.3059 | .9647 |
| 6. Impulse Control | - 1.9186 | - 1.7595 | - .1591 |
| Second-Order Factors: | | | |
| 1. Development Press | .2381 | - 1.2965 | - 1.5345 |
| 2. Control Press | - 1.5644 | - .2004 | - 1.3640 |

[1]Standard scores shown are based on national norms with mean = 0, sigma = 1.

*Significantly different than national norms with a standard score 1.96000 or great significant at the .05 level.

**Significantly different than national norms with a standard score 2.57500 or greater significant at the .01 level.

## Variations in Teacher Perceptions of Building Climate in IGE Schools with High Implementation of the IGE Model as Compared to Teacher Perceptions of Building Climate in IGE Schools with Low Implementation of the IGE Model

When the differences were computed between the standard scores of the OCI instruments completed by teachers in the upper quartile of degree of implementation and the standard scores of the OCI instruments completed by teachers in the lower quartile of degree of implementation, the resulting standard scores for the differences in perceptions as based upon degree of implementation of the IGE Model revealed no significant differences between the two groups. Examination of the obtained standard scores which are reported for the Difference column in Table I do indicate a possible trend toward greater openness and less concern with control as the degree of implementation of the IGE Model increases; this trend, however, does not achieve statistical significance for any of the thirty scales or six first-order and two second-order factors of the OCI.

## Variations in Teacher Perceptions of Building Climate in IGE Schools with High Implementation of the IGE Model as Compared to National Norms for Teacher Perceptions of Building Climate as Measured by the OCI

Examination of the data which are reported in Table I for teacher perceptions of building climate in schools in the upper quartile of implementation of the IGE model reveals that there are no significant differences between the teacher perceptions of building climate in these schools and the national norms for teacher perceptions of school climate.

## Variations in Teacher Perceptions of Building Climate in IGE Schools with Low Implementation of the IGE Model as Compared to National Norms for Teacher Perceptions of Building Climate as Measured by the OCI

Examination of the data which are reported in Table I for teacher perceptions of building climate in schools in the lower quartile of implementation of the IGE

Model reveals, that, at the alpha level of .01 which was set as the criterion level for the study, there are no significant differences between teacher perceptions of building climate in these schools and the national norms for teacher perceptions of school climate. The findings for two scales and one first-order factor are significant at the .05 level. These significant findings would indicate that:

1. Schools in the lower quartile of degree of implementation of the IGE Model are characterized by teacher perceptions of school climate which perceive an environment characterized by assertive and manipulative control behaviors (Dominance).
2. Schools in the lower quartile of degree of implementation of the IGE Model are characterized by teacher perceptions of school climate which indicate an environment in which people are aloof or indifferent in their interpersonal relationships (lack of Nurturance).
3. Schools in the lower quartile of degree of implementation of the IGE Model are characterized by teacher perceptions of school climate which describe an environment in which little attention is given to the application of experiences or skills (a low press for Practicalness).

## Summary

From the results obtained, the investigators concluded that the degree of implementation of the IGE Model does not result in teacher perceptions of school climate which differ significantly from national norms or between the perceptions of teachers in the lower quartile of IGE implementation and teachers in the upper quartile of IGE implementation. The obtained results suggest that the IGE Model may be productive of an increase in teacher perceptions of openness and a decrease in teacher perceptions of control (or a closed climate); these findings, however, can not be reported at a statistically significant level and require further investigation.

## CHAPTER III

## DIFFERENCES IN TEACHER PERCEPTIONS OF SCHOOL CLIMATE IN IGE SCHOOLS WHEN SCHOOLS ARE CATEGORIZED BOTH BY THE DEGREE OF IMPLEMENTATION OF THE IGE MODEL AND THE TYPE OF COMMUNITY IN WHICH THE SCHOOL IS LOCATED

The second major question which had been posed for investigation in this study was:

> If the location of IGE schools is categorized into four classifications--rural, suburban, urban, and inner city--are there differences in teacher perceptions of school climate which are attributable to the type of community in which the school is located?

The categorization of type of community in which the schools were located was based on the judgment of the league facilitators for IGE schools and, in the planning of the study, the investigators accepted these categorizations as being a valid description of type of community for the identification of locations for sample schools.

The Sample. The teachers and buildings involved in data collection for the analysis of differences in teacher perceptions of school climate in IGE schools when the schools are categorized both by the degree of implementation of the IGE Model and the type of community in which the school is located are the same as the sample reported in Chapter II. Four IGE schools in rural locations which had achieved a high degree of implementation of the IGE model provided 66 teachers who participated in the study; with each teacher completing one-half of the OCI and with the use of a sort-and-merge procedure prior to analysis, the obtained N was 33. Five IGE schools in rural locations which had achieved a low degree of implementation of the IGE model provided 80 teachers who participated in the study with a yield of 40 as the N for completed instruments. Four buildings with a low degree of implementation and four buildings with a high degree of implementation provided the data for schools in

suburban settings. This represented 58 teachers and 29 completed instruments for suburban schools with a high degree of implementation of the IGE Model, and 70 teachers with 35 completed OCI instruments for suburban schools with a low degree of implementation of the IGE Model. Five buildings were in each of the two categories of degree of implementation for IGE schools in urban settings. Urban schools with a high degree of implementation of the IGE Model are represented by 62 teachers and 31 completed instruments. Urban schools with a low degree of implementation of the IGE Model are represented by 74 teachers and 37 completed instruments. Five schools, with 94 teachers and 47 completed instruments represent the inner city schools which have attained a high degree of implementation of the IGE Model. Four schools with 64 teachers and 32 completed instruments was the sample size for inner city schools with a low degree of implementation of the IGE Model.

## Degree of Implementation of the IGE Model in Rural Schools and Teacher Perceptions of School Climate

Schools in rural settings which have attained a high degree of implementation of the IGE Model differ, at the .01 level of significance, from other schools in rural settings which have attained only a low degree of implementation of the IGE Model. The data reported in Table II would indicate that teachers in rural schools where a high degree of implementation has been achieved describe a more "open" climate in which development is stressed and control-for-the-sake-of-control has diminished; the obtained t-values for Development Press and Control Press support this finding.

TABLE II

COMPARISON BETWEEN THE UPPER QUARTILE AND LOWER QUARTILE OF RURAL SCHOOLS USING THE INDIVIDUALLY GUIDED EDUCATION (IGE) MODEL

| | SCALE | UPPER QUARTILE MEAN SCORE N = 33 | LOWER QUARTILE MEAN SCORE N = 40 | t-value |
|---|---|---|---|---|
| 1. | Abasement | 3.6970 | 3.8750 | -0.48 |
| 2. | Achievement | 7.4545 | 6.2500 | 3.39** |
| 3. | Adaptability | 7.5152 | 6.0000 | 3.96** |
| 4. | Affiliation | 6.9697 | 5.7250 | 2.92** |
| 5. | Aggression | 2.1515 | 3.0000 | -2.06* |
| 6. | Change | 4.6970 | 4.9750 | -0.79 |
| 7. | Conjunctivity | 7.8182 | 6.2750 | 3.46** |
| 8. | Counteraction | 5.6970 | 5.3750 | 0.77 |
| 9. | Deference | 6.2424 | 5.8500 | 1.06 |
| 10. | Dominance | 3.3636 | 4.6750** | -3.18** |
| 11. | Ego Achievement | 7.0303 | 6.0250 | 2.42* |
| 12. | Emotionality | 6.2424 | 5.2000 | 2.11* |
| 13. | Energy | 7.5758 | 6.5250 | 2.59** |
| 14. | Exhibitionism | 7.1212 | 5.6500 | 3.90** |
| 15. | Fantasied Achievement | 4.4242 | 3.6000 | 2.00* |
| 16. | Harm Avoidance | 8.0303 | 6.8250 | 3.39** |
| 17. | Humanities | 6.6061 | 5.4000* | 2.74** |
| 18. | Impulsiveness | 4.2727 | 4.8500 | -1.65 |
| 19. | Narcissism | 6.4545 | 5.8750 | 1.78 |
| 20. | Nurturance | 7.3333 | 6.0000** | 3.30** |
| 21. | Objectivity | 7.8788 | 6.6500* | 3.28** |
| 22. | Order | 5.2121 | 4.6000 | 1.66 |
| 23. | Play | 3.2727 | 3.8750 | -2.29* |
| 24. | Practicalness | 6.6970 | 6.3000 | 1.20 |
| 25. | Reflectiveness | 6.3333 | 5.0750 | 2.64** |
| 26. | Science | 5.8182 | 4.5750 | 2.78** |
| 27. | Sensuality | 6.6667 | 5.2750 | 3.68** |
| 28. | Sexuality | 2.9394 | 3.0250 | -0.26 |
| 29. | Supplication | 7.1212 | 5.8250 | 3.66** |
| 30. | Understanding | 6.0303 | 4.4500** | 4.14** |

*Mean score which differs significantly at the .05 level from national norms or t-value which represents, at the .05 level, a significant difference between teacher perceptions in rural schools at differing levels of degree of implementation of the IGE Model.

**Mean score which differs significantly at the .01 level from national norms or t-value which represents, at the .01 level, a significant difference between teacher perceptions in rural schools at differing levels of degree of implementation of the IGE Model.

TABLE II (Continued)

COMPARISON BETWEEN THE UPPER QUARTILE AND LOWER QUARTILE OF RURAL SCHOOLS USING THE INDIVIDUALLY GUIDED EDUCATION (IGE) MODEL

| FACTORS | UPPER QUARTILE MEAN SCORE N = 30 | LOWER QUARTILE MEAN SCORE N = 40 | t-value |
|---|---|---|---|
| First-Order Factors: | | | |
| 1. Intellectual Climate | 54.7273 | 45.0250 | 4.13** |
| 2. Achievement Standards | 34.0000 | 29.3750 | 3.70** |
| 3. Practicalness | 14.0303 | 12.3000* | 2.92** |
| 4. Supportiveness | 65.9394 | 55.7500* | 5.10** |
| 5. Orderliness | 41.2727 | 35.4250 | 4.87** |
| 6. Impulse Control | 34.0000 | 34.4000 | -0.37 |
| Second-Order Factors: | | | |
| 1. Development Press | 209.9697 | 177.8750 | 5.50** |
| 2. Control Press | 85.2727 | 100.0000 | -3.67** |

*Mean score which differs significantly at the .05 level from national norms or t-value which represents, at the .05 level, a significant difference between teacher perceptions in rural schools at differing levels of degree of implementation of the IGE Model.

**Mean score which differs significantly at the .01 level from national norms or t-value which represents, at the .01 level, a significant difference between teacher perceptions in rural schools at differing levels of degree of implementation of the IGE Model.

Examination of the first-order factors and obtained t-values for comparison of the perceptions of teachers in schools where a low degree of implementation of the IGE Model has occurred with the perceptions of teachers in schools where a high degree of implementation of the IGE Model has occurred reveals significant differences on five of the six first-order factors of the OCI.

Teachers in rural schools where the IGE Model has been more fully implemented describe an Intellectual Climate which is significantly higher than that described by teachers where the IGE Model is less fully implemented. This finding is interpreted to mean that teachers in the rural schools where the IGE Model has been most fully implemented perceive a building climate which is more intellectually active, more interested in social action, and more concerned about personal and interpersonal effectiveness than is the climate in schools where the model is less fully implemented. Of the scales which make up the Intellectual Climate factor of the OCI, teachers in the upper quartile of implementation in rural schools are, in comparison with teachers in the lower quartile of implementation in rural schools, significantly more positive in their perceptions of a building climate which fosters an interest in Humanities, Science, Reflectiveness, Understanding, Sensuality, and Exhibitionism. At the .05 level, they are also more positive in their perceptions of a climate which fosters Fantasied Achievement and Ego Achievement. The only factor which comprises Intellectual Climate which does not reveal a difference, significant at either the .01 or .05 level, in the perceptions of teachers from the upper quartile of degree of implementation as compared to the perceptions of teachers from the lower quartile of degree of implementation is in the perceived press for Change.

Teachers in rural schools where a high degree of implementation of the IGE Model has occurred are, in comparison with teachers in rural schools where a

low degree of implementation of the IGE Model has occurred, more positive in their perception of a building climate which fosters the first-order factor of Achievement Standards. Significant findings between the two groups on the scales of Achievement and Energy, and findings significant at the .05 level on the scales of Ego Achievement and Emotionality, describe a climate which stresses hard work and commitment to institutional goals in the schools which have achieved a high implementation of the IGE Model. Teachers in both low implementing and high implementing schools have shown no significant differences in their perceptions of the press for the scale of Counteraction which may be interpreted as indicating that increased implementation of the IGE Model in rural schools does not necessarily lead to increased willingness by teachers to try to overcome failure or engage in risk-taking behaviors.

While teachers in high implementing rural schools differ significantly in their perceptions of the press for the first-order factor of Practicalness, as compared to the perceptions which are held by teachers in the low implementing rural schools, it should be noted that teachers in the low implementing schools are significantly different from national norms, at the .05 level, in their perceptions of this factor. Part of this deviation from national norms can be ascribed to the significant deviation, at the .01 level, of the low implementing teachers from national norms for the scale for Nurturance, one of the scales which comprises the first-order factor of Practicalness. Low implementing teachers, in comparison with high implementing teachers, are significantly lower on the Nurturance scale. There are no significant differences in the perceptions of the two groups on the scale of Practicalness which, along with the scale for Nurturance, comprises the loadings for the first-order factor of Practicalness.

Interpretation of these findings would suggest that the significant

differences in perception between the two groups for the first-order factor of Practicalness is a result of teachers in schools with a low degree of implementation of the IGE Model describing a school climate which is less friendly than the climate usually described by most teachers in schools throughout the nation.

Significant differences were also found to exist between the perceptions of teachers in the high implementing group and teachers in the low implementing group for the first-order factor of Supportiveness. A significantly lower score on the scale for Dominance, a significantly higher score on the scale for Objectivity, a significantly higher score on the scale for Affiliation, a significantly higher score on the scale for Conjunctivity, a significantly higher score on the scale for Supplication, a score on the scale for Aggression which was significantly lower at the .05 level, a score on the scale for Harm Avoidance which was significantly higher, and a score on the scale for Nurturance which was significantly higher all describe a climate which, as perceived by the teacher in the IGE rural school with a high degree of implementation, fosters greater respect for individual integrity coupled with an attitude of democratic paternalism than is the case in the rural school with a lower degree of implementation of the IGE Model.

Significantly higher scores on the scales of Adaptability, Conjunctivity, and Harm Avoidance were found to exist in comparing the perceptions of teachers in rural schools with a high degree of implementation of the IGE Model with the perceptions of teachers in rural schools with a low degree of implementation of the IGE Model. These significant findings on these three scales are a major cause of the significant difference which was found to exist between the perceptions of high and low implementing groups on the first-order factor of Orderliness. Interpretation of these findings would suggest that teachers in high implementing

schools, as compared to teachers in low implementing schools, were more likely to perceive a climate within the building which stressed planning, procedural orderliness, and a respect for authority based on a desire to grow and profit from criticism and advice obtained from within the school or community.

Comparison to National Norms. As the data shown in Table II indicate, there were no significant differences between perceptions of school climate as described by teachers in high implementing rural schools and as described by the national norms for the OCI. Three scales did show significant findings (at the .01 level) to indicate differences in the perceptions of teachers in low implementing IGE rural schools and national norms for the OCI. Teachers in low implementing rural schools, in comparison to national norms, described a building climate which was more likely to be characterized by a lack of interest in intellectual activities, a lack of interpersonal warmth among staff members, and the presence of assertive and manipulative behaviors as a means of controlling teacher behaviors. These interpretations are based on significant findings for the scales of Understanding, Nurturance and Dominance.

Summary. From the findings which were obtained by comparison of teacher perceptions from high implementing rural IGE schools with low implementing rural IGE schools, the investigators concluded that rural schools with a high implementation of the IGE Model were likely to achieve teacher behaviors which would express increased intellectual activity; increased interpersonal effectiveness within the school, increased commitment and effort aimed at achieving understood goals; a greater emphasis on planning and on community involvement; and, a greater respect for individual integrity. While these outcomes seem probable based on the findings of this study, it should be noted that they represent trends rather than changes which are of a magnitude great enough to produce a significant difference between

teacher perceptions of building climate in high implementing rural schools using the IGE model and national norms for teacher perceptions of building climate.

## Degree of Implementation of the IGE Model in Suburban Schools and Teacher Perceptions of School Climate

Within suburban locations, as the data reported in Table III indicate, there are few significant differences (at the .01 level) between teacher perceptions of school climate in high implementing IGE schools and teacher perceptions of school climate in low implementing IGE schools. Both second-order factors of Development Press and Control Press are significant at the .05 level and indicate that the high implementing suburban IGE schools, when compared to the low implementing suburban IGE schools, have a climate which is described by teachers as fostering greater intellectual development and placing less emphasis on control-for-the-sake-of-control. Teachers in high implementing IGE schools are, in comparison to national norms for teacher perceptions of school climate, less likely to perceive a high Control Press; a finding which is significant at the .05 level. Since the major first-order factor which determines Control Press is Impulse Control, it is interesting to note that, at the .05 level, both low implementing suburban IGE schools and high implementing IGE suburban schools report a lower press for Impulse Control than is common in teacher perceptions of school climate. At the .05 level, teachers in high implementing suburban IGE schools report a higher press for Achievement Standards than is commonly reported in measurement of teacher perceptions of school climate.

On both the first-order factor of Intellectual Climate and the first-order factor of Orderliness, teachers in the high implementing IGE suburban schools report a higher press than do teachers in the low implementing IGE suburban schools; this finding, however, is significant only at the .05 level.

TABLE III

COMPARISON BETWEEN THE UPPER QUARTILE AND LOWER QUARTILE OF SUBURBAN SCHOOLS USING THE INDIVIDUALLY GUIDED EDUCATION (IGE) MODEL

| | SCALE | UPPER QUARTILE MEAN SCORE N = 29 | LOWER QUARTILE MEAN SCORE N = 35 | t-Value |
|---|---|---|---|---|
| 1. | Abasement | 2.3103 | 2.8571 | 1.76 |
| 2. | Achievement | 7.8966 | 6.7429 | 3.63** |
| 3. | Adaptability | 7.2069 | 5.8571 | 3.05** |
| 4. | Affiliation | 7.5862 | 7.6857 | - 0.27 |
| 5. | Aggression | 2.1724 | 2.7429 | - 1.86 |
| 6. | Change | 6.1724 | 5.9714 | 0.51 |
| 7. | Conjunctivity | 8.0690 | 6.9143 | 2.60** |
| 8. | Counteraction | 7.2414 | 6.6286 | 1.73 |
| 9. | Deference | 5.4828 | 5.0571 | 1.31 |
| 10. | Dominance | 3.1034 | 3.3429 | - 0.55 |
| 11. | Ego Achievement | 7.1034 | 7.0571 | 0.12 |
| 12. | Emotionality | 6.8966* | 6.7143* | 0.46 |
| 13. | Energy | 8.0000 | 7.0286 | 2.82** |
| 14. | Exhibitionism | 7.7931* | 6.9714 | 2.37* |
| 15. | Fantasied Achievement | 5.5172 | 5.1714 | 1.04 |
| 16. | Harm Avoidance | 6.8966 | 7.2286 | - 1.02 |
| 17. | Humanities | 6.6522 | 6.6571 | 0.00 |
| 18. | Impulsiveness | 5.7241* | 5.5714 | 0.39 |
| 19. | Narcissism | 6.4483 | 6.0571 | 0.92 |
| 20. | Nurturance | 6.6552* | 7.1429 | - 0.96 |
| 21. | Objectivity | 8.4483 | 7.9714 | 1.33 |
| 22. | Order | 4.4483 | 4.4000 | 0.14 |
| 23. | Play | 4.3448 | 4.5429 | - 0.53 |
| 24. | Practicalness | 6.0345 | 5.9143 | 0.45 |
| 25. | Reflectiveness | 7.0345 | 6.5143 | 1.06 |
| 26. | Science | 6.2414 | 6.0286 | 0.42 |
| 27. | Sensuality | 7.4138 | 6.2571 | 3.71** |
| 28. | Sexuality | 3.3793 | 3.9429 | - 1.44 |
| 29. | Supplication | 6.5862 | 6.9714 | - 1.23 |
| 30. | Understanding | 7.1724 | 6.0000 | 3.35** |

*Mean score which differs significantly at the .05 level from national norms or t-value which represents, at the .05 level, a significant difference between teacher perceptions in suburban schools at differing levels of degree of implementation of the IGE Model.

**Mean score which differs significantly at the.01 level from national norms or t-value which represents, at the .01 level, a significant difference between teacher preceptions in suburban schools at differing levels of degree of implementation of the IGE Model.

TABLE III (CONTINUED)

COMPARISON BETWEEN THE UPPER QUARTILE AND LOWER QUARTILE OF SUBURBAN SCHOOLS USING THE INDIVIDUALLY GUIDED EDUCATION (IGE) MODEL

| FACTOR | UPPER QUARTILE MEAN SCORE N = 29 | LOWER QUARTILE MEAN SCORE N = 35 | t-value |
|---|---|---|---|
| First-Order Factors: | | | |
| 1. Intellectual Climate | 61.1034 | 56.6286 | 2.08* |
| 2. Achievement Standards | 37.1379* | 34.1714 | 2.88** |
| 3. Practicalness | 12.6897 | 13.0571 | - 0.60 |
| 4. Supportiveness | 66.6552 | 64.9714 | 0.85 |
| 5. Orderliness | 38.5517 | 35.5143 | 2.10* |
| 6. Impluse Control | 29.6897* | 29.5143* | 0.14 |
| Second-Order Factors: | | | |
| 1. Development Press | 216.1379 | 204.3428 | 2.16* |
| 2. Control Press | 71.4482* | 78.7143 | - 2.03* |

*Mean score which differs significantly at the .05 level from national norms or t-value which represents, at the .05 level, a significant difference between teacher perceptions in suburban schools at differing levels of degree of implementation of the IGE Model.

**Mean score which differs significantly at the .01 level from national norms or t-value which represents, at the .01 level, a significant difference between teacher perceptions in suburban schools at differing levels of degree of implementation of the IGE Model.

The only first-order factor or second-order factor which achieves significance at the .01 level which was established as the criterion for this study is the higher press for Achievement Standards which is reported by teachers in the high implementing IGE suburban schools as compared to the perceptions of teachers in the low implementing IGE suburban schools. Two of the scales which indicate significant differences at the .01 level--Achievement and Energy--are major components of this factor. It should also be noted that the mean score for the first-order factor of Achievement Standards is, for teachers in the high implementing IGE suburban schools, significantly higher, at the .05 level, than national norms.

In addition to the statistical significance obtained by the scales of Achievement and Energy, four other scales related to the second-order factor of Development Press are also significantly higher, at the .01 level, for teachers in the high than in the low implementing IGE suburban group; these scales are Adaptability, Conjunctivity, Sensuality, and Understanding.

Summary. From the evidence which is summarized in Table III, it would appear that the degree of IGE implementation in suburban schools has relatively little effect on teacher perceptions of climate. To the extent that effects can be noted and summarized, it would appear that the increased implementation of the IGE Model leads to an increased press within the school, as perceived by teachers, for climate scales and factors which are already present in the suburban school setting. The suburban school's climate, as perceived by teachers, appears to be one in which there is a high emphasis on achievement and intellectual development on the one hand, and a low emphasis on control. The overall climate is an "open" climate which stresses development. From the findings, it would appear that the increased implementation of the IGE Model only heightens pre-existing conditions in the suburban school.

## Degree of Implementation of the IGE Model in Urban Schools and Teacher Perceptions of School Climate

Teachers in high implementing urban IGE schools, as compared to teachers in low implementing urban IGE schools, report a significantly higher emphasis on the first-order factor of Intellectual Climate, a finding which is supported by similar findings for three of the scales which comprise the Intellectual Climate factor: Humanities, Science, and Sensuality. Only one other scale, Energy, a component part of the first-order factor of Achievement Standards, achieves statistical significance. For the first-order factor and the four scales which identify significant differences in the perceptions of teachers in high implementing urban IGE schools as compared to the perceptions of teachers in low implementing urban IGE schools, all differences favor the schools with the greater degree of implementation. The same is true for the findings which are significant at the .05 level; the high implementing urban IGE school, in comparison to the low implementing urban IGE school, has: a higher press for Adaptability; a higher press for Affiliation; a lower press for Aggression; a higher press for Exhibitionism or pride; a higher Development Press; and, a lower Control Press. Table IV reports the data for IGE schools in urban settings.

Teachers in high implementing urban IGE schools, in comparison with national norms, report a higher press for Dominance and a lower press for Impulse Control (at this level). No significant differences were noted between low implementing urban schools and national norms.

Summary. The composite image of the high implementing urban IGE school which emerges from the data which is summarized in Table IV is one which describes a setting in which there is an open expression of opinions, people seek to gain

influence over events or over other people through assertive behaviors and manipulative controls, and the total environment is characterized by a strong interest in intellectual activities and aesthetic experiences. The low implementing IGE school is a less forceful version of the same picture.

TABLE IV

COMPARISON BETWEEN THE UPPER QUARTILE AND LOWER QUARTILE OF URBAN SCHOOLS USING THE INDIVIDUALLY GUIDED EDUCATION (IGE) MODEL

| | SCALE | UPPER QUARTILE MEAN SCORE N = 31 | LOWER QUARTILE MEAN SCORE N = 37 | t-value |
|---|---|---|---|---|
| 1. | Abasement | 3.9032 | 3.4595 | 1.07 |
| 2. | Achievement | 7.1935 | 6.7838 | 1.16 |
| 3. | Adaptability | 7.1935 | 6.4865 | 2.07* |
| 4. | Affiliation | 7.3226 | 6.5135 | 2.39* |
| 5. | Aggression | 2.3226 | 3.1351 | - 1.99* |
| 6. | Change | 5.8710 | 5.4324 | 1.13 |
| 7. | Conjunctivity | 7.7097 | 7.2703 | 1.05 |
| 8. | Counteraction | 6.1935 | 5.9189 | 0.66 |
| 9. | Deference | 5.5161 | 5.2703 | 0.64 |
| 10. | Dominance | 4.4839* | 3.6757 | 1.91 |
| 11. | Ego Achievement | 6.7097 | 6.5946 | 0.27 |
| 12. | Emotionality | 6.1290 | 6.1351 | - 0.01 |
| 13. | Energy | 7.7419 | 6.5946 | 3.45** |
| 14. | Exhibitionism | 7.3226 | 6.7297 | 2.00* |
| 15. | Fantasied Achievement | 4.7097 | 4.1892 | 1.36 |
| 16. | Harm Avoidance | 7.4839 | 7.1622 | 0.95 |
| 17. | Humanities | 7.2581 | 5.9730 | 2.94** |
| 18. | Impulsiveness | 5.5806 | 5.2432 | 0.77 |
| 19. | Narcissism | 6.2581 | 6.0000 | 0.67 |
| 20. | Nurturance | 7.4516 | 6.7568 | 1.81 |
| 21. | Objectivity | 7.8065 | 7.4324 | 0.99 |
| 22. | Order | 4.6452 | 4.8649 | - 0.65 |
| 23. | Play | 4.5161 | 3.8919 | 1.67 |
| 24. | Practicalness | 6.2581 | 6.1892 | 0.24 |
| 25. | Reflectiveness | 6.6452 | 6.1351 | 1.28 |
| 26. | Science | 6.1290 | 4.9459 | 2.60** |
| 27. | Sensuality | 7.0323 | 6.1081 | 2.83** |
| 28. | Sexuality | 3.8387 | 3.7027 | 0.39 |
| 29. | Supplication | 6.5484 | 6.7027 | - 0.46 |
| 30. | Understanding | 5.9355 | 5.3784 | 1.60 |

*Mean score which differs significantly at the .05 level from national norms or t-value which represents, at the .05 level, a significant difference between teacher perceptions in urban schools at differing levels of degree of implementation of the IGE Model.

**Mean score which differs significantly at the .01 level from national norms or t-value which represents, at the .01 level, a significant difference between teacher perceptions in urban schools at differing levels of degree of implementation of the IGE Model.

TABLE IV (CONTINUED)

COMPARISON BETWEEN THE UPPER QUARTILE AND LOWER QUARTILE OF URBAN SCHOOLS USING THE INDIVIDUALLY GUIDED EDUCATION (IGE) MODEL

| FACTOR | UPPER QUARTILE MEAN SCORE N = 31 | LOWER QUARTILE MEAN SCORE N = 37 | t-value |
|---|---|---|---|
| First-Order Factors: | | | |
| 1. Intellectual Climate | 57.6129 | 51.4865 | 2.89** |
| 2. Achievement Standards | 33.9677 | 32.0270 | 1.57 |
| 3. Practicalness | 13.7097 | 12.9459 | 1.51 |
| 4. Supportiveness | 63.6129 | 61.5676 | 1.07 |
| 5. Orderliness | 38.8064 | 37.0540 | 1.49 |
| 6. Impulse Control | 30.2903* | 31.1622 | - 0.68 |
| Second-Order Factors: | | | |
| 1. Development Press | 207.7097 | 195.0811 | 2.31* |
| 2. Control Press | 78.7097 | 87.6486 | - 2.38* |

*Mean score which differs significantly at the .05 level from national norms or t-value which represents, at the.05 level, a significant difference between teacher perceptions in urban schools at differing levels of degree of implementation of the IGE Model.

**Mean score which differs significantly at the .01 level from national norms or t-value which represents, at the.01 level, a significant difference between teacher perceptions in urban schools at differing levels of degree of implementation of the IGE Model.

## Degree of Implementation of the IGE Model in Inner City Schools and Teacher Perceptions of School Climate

As was true for differing levels of implementation of the IGE Model in rural settings, the data reported in Table V reveal a wide assortment of differences in teacher perceptions of school climate in high implementing inner-city IGE schools as compared to low implementing inner-city IGE schools. All first-order and second-order factors, except Impulse Control, produce findings significant at the .01 level when the perceptions of teachers in high and low implementing inner-city IGE schools are compared. Teachers in both high and low implementing inner-city IGE schools, in comparison with national norms, describe a climate which is significantly lower at the .05 level in the felt press for Impulse Control. This may be interpreted as indicating that teachers in inner-city schools feel less constraint in the expression of personal opinions than is the case for most teachers in most schools.

Of the thirty scales of the OCI, there is a significant difference on fourteen in teacher perceptions (at the .01 level) when teachers in high implementing inner-city IGE schools are compared to teachers in low implementing inner-city IGE schools. On an additional six scales, there is a significant change in teacher perceptions (at the .05 level) for comparison of the same two groups of teachers. Examination of the scales reveals that all twenty-one scales reflect movement in teacher perceptions toward a greater interest in intellectual activities and less of a concern with control. The atmosphere of the school, as perceived by teachers, is significantly more "open" and more productive in the high implementing inner-city IGE schools than it is in the low implementing inner-city IGE schools. In considering this information, however, it must be kept in mind that teachers in low implementing inner-city IGE schools perceive a climate which is more closed

TABLE V

COMPARISON BETWEEN THE UPPER QUARTILE AND LOWER QUARTILE OF INNER-CITY SCHOOLS USING THE INDIVIDUALLY GUIDED EDUCATION (IGE) MODEL

| | SCALE | UPPER QUARTILE MEAN SCORE N = 47 | LOWER QUARTILE MEAN SCORE N = 32 | t-value |
|---|---|---|---|---|
| 1. | Abasement | 3.0426 | 3.8750 | - 2.25* |
| 2. | Achievement | 6.6596 | 5.8438 | 2.19* |
| 3. | Adaptability | 6.8298 | 5.8750 | 2.40* |
| 4. | Affiliation | 7.1064 | 5.7500 | 3.65** |
| 5. | Aggression | 2.9787 | 4.0000** | - 2.77** |
| 6. | Change | 6.4681 | 6.7813* | - 0.76 |
| 7. | Conjunctivity | 7.5106 | 5.5313* | 4.23** |
| 8. | Counteraction | 6.3191 | 5.0313 | 2.96** |
| 9. | Deference | 5.0851 | 5.1250 | - 0.10 |
| 10. | Dominance | 3.8298 | 4.9375** | - 2.58** |
| 11. | Ego Achievement | 7.0213 | 5.3438* | 4.00** |
| 12. | Emotionality | 6.7021* | 6.2813 | 1.14 |
| 13. | Energy | 7.5106 | 5.4688 | 4.95** |
| 14. | Exhibitionism | 6.9574 | 5.6563 | 3.28** |
| 15. | Fantasied Achievement | 4.9362 | 4.2813 | 1.99* |
| 16. | Harm Avoidance | 6.4255* | 6.3438* | 0.21 |
| 17. | Humanities | 6.6596 | 5.2500* | 3.55** |
| 18. | Implusiveness | 5.3191 | 5.7500* | - 1.01 |
| 19. | Narcissism | 5.4681 | 4.8438** | 1.60 |
| 20. | Nurturance | 7.2766 | 6.0313** | 3.16** |
| 21. | Objectivity | 8.0851 | 6.2813** | 3.99** |
| 22. | Order | 4.3830 | 3.7813* | 1.54 |
| 23. | Play | 4.1702 | 5.0000** | - 2.29 |
| 24. | Practicalness | 5.9574 | 5.6563 | 0.98 |
| 25. | Reflectiveness | 6.9149 | 4.7188* | 5.32** |
| 26. | Science | 5.8936 | 4.0626* | 3.80** |
| 27. | Sensuality | 6.4894 | 5.1875 | 3.88** |
| 28. | Sexuality | 4.0638* | 3.6563 | 1.09 |
| 29. | Supplication | 6.8298 | 5.9375 | 2.28* |
| 30. | Understanding | 6.1277 | 4.8438* | 3.08** |

*Mean score which differs significantly at the .05 level from national norms or t-value which represents, at the.05 level, a significant difference between teacher perceptions in inner city schools at differing levels of degree of implementation of the IGE Model.

**Mean score which differs significantly at the .01 level from national norms or t-value which represents, at the.01 level, a significant difference between teacher perceptions in inner-city schools at differing levels of degree of implementation of the IGE Model.

TABLE V (CONTINUED)

COMPARISON BETWEEN THE UPPER QUARTILE AND LOWER QUARTILE OF INNER-CITY SCHOOLS USING THE INDIVIDUALLY GUIDED EDUCATION (IGE) MODEL

| FACTOR | UPPER QUARTILE MEAN SCORE N = 47 | LOWER QUARTILE MEAN SCORE N = 32 | t-value |
|---|---|---|---|
| First-Order Factors: | | | |
| 1. Intellectual Climate | 57.4681 | 46.1250 | 4.93** |
| 2. Achievement Standards | 34.2128 | 27.9688 | 4.63** |
| 3. Practicalness | 13.2340 | 11.6875** | 2.78** |
| 4. Supportiveness | 63.3830 | 53.0625** | 4.56** |
| 5. Orderliness | 35.7021 | 31.5000* | 2.82** |
| 6. Impulse Control | 29.8085* | 29.6563* | 0.11 |
| Second-Order Factors: | | | |
| 1. Development Press | 204.0000 | 170.3438 | 5.35** |
| 2. Control Press | 78.1277 | 95.5625 | - 4.18** |

*Mean score which differs significantly at the .05 level from national norms or t-value which represents, at the .05 level, a significant difference between teacher perceptions in inner city schools at differing levels of degree of implementation of the IGE Model.

**Mean score which differs significantly at the .01 level from national norms or t-value which represents, at the .01 level, a significant difference between teacher perceptions in inner city schools at differing levels of degree of implementation of the IGE Model.

and less productive, in comparison to national norms for teacher perceptions of school climate, on six scales and two first-order factors which achieve significance at the .01 level and on an additional nine scales and two first-order factors which achieve significance at the .05 level. Although four scales and one first-order factor which measure the perceptions of climate held by teachers in high implementing inner-city IGE schools are significantly different from national norms at the .05 level, there are no significant differences at the .01 level for the comparison of teacher perceptions of school climate in high implementing IGE schools with national norms for perceptions of school climate as measured by the Organizational Climate Index.

Summary. From the data which are reported in Table V, the investigators concluded that the increased implementation of the IGE model in inner-city schools should: (1) lead to an improvement in the Intellectual Climate by increasing teacher interest in intellectual activities, social action, and improvement of personal and interpersonal effectiveness; (2) lead to teacher behaviors which reflected hard work and perseverance expressed in an increased commitment to the needs of the school; (3) lead to increased sharing of help and expertise; (4) result in greater respect for each other's integrity and yet foster a willingness to help one another; (5) help to develop improved organization and procedural thoroughness in the planning and conducting of duties aimed at accomplishing the purposes of the school; and (6) create greater openness and flexibility in the day-to-day operation of the building.

## Differences in Teacher Perceptions of School Climate Based on Type of Community in Schools Where High Implementation of the IGE Model Has Occurred

As a final investigation of the effects of type of community on teacher perceptions of school climate in IGE schools, all schools which had been classified as having achieved high implementation of the IGE Model were compared on teacher perceptions of school climate by use of a one-way analysis of variance. The investigators decided that comparison of teacher perceptions of school climate in high implementing IGE schools would help to pinpoint those areas of teacher perception of climate which are not as easily susceptible to change by the implementation of the IGE Model because of the climate of varying types of communities. Since the variation in teacher perceptions of climate in low implementing IGE schools was considered to be more susceptible to multiple unidentified variables which might be responsible for differences in perception, data on low implementing IGE schools were not included as a means of identifying differences in teacher perceptions of school climate which result from the type of community in which an IGE school might be located.

In Table VI, the data results from an analysis of variance between teacher perceptions in high implementing IGE schools based on type of community are provided. The Scheffe test was applied to all significant findings to test the significance between pairings.

Rural Schools. Teachers in rural schools, in comparison with their suburban counterparts, describe a climate in high implementing IGE schools which: (1) has a significantly higher press for Abasement; (2) has a significantly lower press for Change; (3) is lower in the press for Counteraction, i.e., there is a significantly lower willingness to try to overcome difficulties or failures which occur; and (4) has a higher Control Press, indicating the presence of a less open climate. Rural teachers, when compared to their urban colleagues, are less likely to feel

TABLE VI

EFFECTS OF LOCATION ON TEACHER PERCEPTION OF SCHOOL CLIMATE IN IGE SCHOOLS WITH HIGH IMPLEMENTATION

| DIMENSION BEING MEASURED | MEAN SCORES | | | | F |
|---|---|---|---|---|---|
| | Rural N = 33 | Suburban N = 29 | Urban N = 31 | Inner City N = 47 | |
| Scales of the OCI: | | | | | |
| 1. Abasement | 3.6970 | 2.3103 | 3.9032 | 3.0426 | 6.9841** |
| 2. Achievement | 7.4545 | 7.8966 | 7.1935 | 6.6596 | 5.7315** |
| 3. Adaptability | 7.5152 | 7.2069 | 7.1935 | 6.8298 | 1.1220 |
| 4. Affiliation | 6.9697 | 7.5862 | 7.3226 | 7.1064 | 0.9841 |
| 5. Aggression | 2.1515 | 2.1724 | 2.3226 | 2.9787 | 2.4847 |
| 6. Change | 4.6970 | 6.1724 | 5.8710 | 6.4681* | 9.1213** |
| 7. Conjunctivity | 7.8182 | 8.0690 | 7.7097 | 7.5106 | 0.6412 |
| 8. Counteraction | 5.6970 | 7.2414 | 6.1935 | 6.3191 | 4.4347** |
| 9. Deference | 6.2424 | 5.4828 | 5.5161 | 5.0851 | 3.8603** |
| 10. Dominance | 3.3636 | 3.1034 | 4.4839* | 3.8298 | 3.8895** |
| 11. Ego Achievement | 7.0303 | 7.1034 | 6.7097 | 7.0213 | 0.3693 |
| 12. Emotionality | 6.2424 | 6.8966* | 6.1290 | 6.7021* | 1.3629 |
| 13. Energy | 7.5758 | 8.0000 | 7.7419 | 7.5106 | 0.7658 |
| 14. Exhibitionism | 7.1212 | 7.7931* | 7.3226 | 6.9574 | 2.0412 |
| 15. Fantasied Achievement | 4.4242 | 5.5172 | 4.7097 | 4.9362 | 2.6823* |
| 16. Harm Avoidance | 8.0303 | 6.8966 | 7.4839 | 6.4255* | 8.4786** |
| 17. Humanities | 6.6061 | 6.6552 | 7.2581 | 6.6596 | 1.2041 |
| 18. Impulsiveness | 4.2727 | 5.7241* | 5.5806 | 5.3191 | 4.7948** |
| 19. Narcissism | 6.4545 | 6.4483 | 6.2581 | 5.4681 | 3.5260* |
| 20. Nurturance | 7.3333 | 6.6552* | 7.4516 | 7.2766 | 1.2608 |
| 21. Objectivity | 7.8788 | 8.4483 | 7.8065 | 8.0851 | 1.0869 |
| 22. Order | 5.2121 | 4.4483 | 4.6452 | 4.3830 | 2.2097 |
| 23. Play | 3.2727 | 4.3448 | 4.5161 | 4.1702 | 5.5500** |

TABLE VI (Continued)

EFFECTS OF LOCATION ON TEACHER PERCEPTIONS OF SCHOOL CLIMATE IN IGE SCHOOLS WITH HIGH IMPLEMENTATION

| DIMENSION BEING MEASURED | MEAN SCORES | | | | F |
|---|---|---|---|---|---|
| | Rural N = 33 | Suburban N = 29 | Urban N = 31 | Inner City N = 47 | |
| Scales of the OCI: | | | | | |
| 24. Practicalness | 6.6970 | 6.0345 | 6.2581 | 5.9574 | 2.6476* |
| 25. Reflectiveness | 6.3333 | 7.0345 | 6.6452 | 6.9149 | 1.0581 |
| 26. Science | 5.8182 | 6.2414 | 6.1290 | 5.8936 | 0.3540 |
| 27. Sensuality | 6.6667 | 7.4138 | 7.0323 | 6.4894 | 2.7766* |
| 28. Sexuality | 2.9394 | 3.3793 | 3.8387 | 4.0638* | 4.4869** |
| 29. Supplication | 7.1212 | 6.5862 | 6.5484 | 6.8298 | 1.0819 |
| 30. Understanding | 6.0303 | 7.1724 | 5.9355 | 6.1277 | 4.3170** |

*Mean score which differs significantly at the .05 level from national norms or F, with 3 and 136 degrees of freedom, significant at the .05 level with obtained value of 2.60 or greater.

**Mean score which differs significantly at the .01 level from national norms or F, with 3 and 136 degrees of freedom, significant at the .01 level with obtained value of 3.78 or greater.

TABLE VI (Continued)

EFFECTS OF LOCATION ON TEACHER PERCEPTIONS OF SCHOOL CLIMATE IN IGE SCHOOLS WITH HIGH IMPLEMENTATION

| DIMENSION BEING MEASURED | MEAN SCORES | | | | F |
|---|---|---|---|---|---|
| | Rural N = 33 | Suburban N = 29 | Urban N = 31 | Inner City N = 47 | |
| First-Order Factors of the OCI: | | | | | |
| 1. Intellectual Climate | 54.7273 | 61.1034 | 57.6129 | 57.4681 | 2.7135* |
| 2. Achievement Standards | 34.0000 | 37.1379* | 33.9677 | 34.2128 | 2.8915* |
| 3. Practicalness | 14.0303 | 12.6897 | 13.7097 | 13.2340 | 2.1381 |
| 4. Supportiveness | 65.9394 | 66.6552 | 63.6129 | 63.3830 | 1.4430 |
| 5. Orderliness | 41.2727 | 38.5517 | 38.8064 | 35.7021 | 6.7393** |
| 6. Impulse Control | 34.0000 | 29.6897* | 30.2903* | 29.8085* | 5.0157** |
| Second-Order Factors of the OCI: | | | | | |
| 1. Development Press | 209.9697 | 216.1379 | 207.7097 | 204.0000 | 1.7040 |
| 2. Control Press | 85.2727 | 71.4483* | 78.7097 | 78.1277 | 3.8775** |

*Mean score which differs significantly at the .05 level from national norms or F, with 3 and 136 degrees of freedom, significant at the .05 level with obtained value of 2.60 or greater.

**Mean score which differs significantly at the .01 level from national norms or F, with 3 and 136 degrees of freedom, significant at the .01 level with obtained value of 3.78 or greater.

that the climate of the school shows a press for Play, or pleasure-seeking. In comparison with inner-city teachers, rural teachers: (1) describe a significantly lower press for Change; (2) are more likely to show Deference to the opinions and preferences of superiors; (3) are less likely to take risks and more likely to be cautious as a means of Harm Avoidance; (4) have a greater press for Prudishness (the reverse of Sexuality); and, have a greater press for the first-order factors of Orderliness and Impulse Control. When these significant findings are considered as a total gestalt, the investigators concluded that rural locations are more likely than other locations, regardless of the degree of location, to be characterized by a building climate which is more restrictive, marked by greater deference to administrato and less open to personal expression than would be the case in other types of locations.

Suburban Schools. From the significant findings obtained, in comparison with other types of communities, suburban schools were characterized as having a greater sense of assurance (the opposite of Abasement), a greater sense of Achievement, a greater press for Change, a greater willingness to try to overcome difficulties or failures (Counteraction), and a lower Control Press. These findings were interpreted as indicating that the suburban school is more likely than other types of locations to be characterized by an "open" climate which fosters development and encourages experimentation.

Urban Schools. Urban teachers describe a climate in which there is greater Abasement than is found in the suburban schools and more of a sense of Play, or pleasure-seeking, than is found in the rural schools. Other than these two instances, however, the urban school shows no significant differences when compared with other types of locations. The urban school climate, based on the findings of this study, is a more self-depreciating environment than the other types of

locations which have been defined; additionally, the perceived behaviors in the urban school are ones in which others are seen as trying to assert control or manipulate people and events (note the high press for Dominance, in comparison with national norms).

Inner City Schools. In comparison to the perceptions of suburban teachers, inner-city teachers report a lower press for Achievement. All other areas of significant intergroup differences are in comparison of rural teacher perceptions of school climate with inner-city teachers perceptions of school climate. The inner-city teacher, in comparison to his rural counterpart, feels a greater press for Change, is less likely to be submissive or to show Deference to the opinions and preferences of superiors, has a greater press for Sexuality, and reports a lower press for Orderliness and Impulse Control.

Summary. While the investigation of differences in teacher perceptions of building climate yielded no significant differences based solely on the degree of implementation, as was reported in Chapter II, the categorization of data on the basis of both the degree of implementation and the nature of the community provided a number of significant findings. From those findings, some general conclusions were reached by the investigators:

1. As the degree of implementation of the IGE Model increases, it seems probable that changes in teacher perceptions of building climate will occur; those changes will be toward a climate which is simultaneously more productive and more "open."

2. As the degree of implementation of the IGE Model increases, the greatest changes occur in rural and inner city settings.

3. As the degree of implementation of the IGE Model increases, the smallest amount of measurable change in teacher perceptions of school climate occurs in urban schools.

4. The climate of the suburban school is, at all stages of implementation, closer to the climate which seems to be fostered by the implementation of the IGE Model.

## CHAPTER IV

## LENGTH OF INVOLVEMENT IN THE IGE MODEL AND TEACHER PERCEPTIONS OF SCHOOL CLIMATE

The third major question which was posed for consideration in this study was:

> Are there significant differences in teacher perceptions of school climate in IGE schools which are identifiable as a result of the length of time which has passed since the IGE Model was implemented?

In designing this part of the study, the investigators assumed that teacher perceptions of school climate after one, two, and three years of implementing the IGE Model were, when compared against one another, an accurate measure of the developmental pattern which occurs in the perceptions of school climate which teachers have as the IGE Model is implemented.

The Sample. Ninety-eight teachers from buildings randomly selected from those schools involved in the first year of implementation of the IGE Model provided 49 completed instruments; seventy-six teachers from buildings randomly selected from those schools involved in the second year of implementation of the IGE Model provided 38 completed instruments; and, seventy-four teachers from buildings randomly selected from those schools involved in the third year of implementation of the IGE Model provided 37 completed instruments. Analysis of variance was employed to determine differences in climate perceptions among these three groups of teachers.

Findings. The findings reported in Table VII indicate the presence of a number of significant differences in teacher perceptions of building climate between the three groups with varying lengths of involvement in the IGE Model. Use of the Scheffe test to identify significant differences between each possible pairing of the three groups yielded the following results which were significant

at the .01 level, the established criterion level for this study:

TABLE VII

EFFECTS OF LENGTH OF INVOLVEMENT IN THE IGE MODEL
ON TEACHER PERCEPTIONS OF SCHOOL CLIMATE

| | SCALE | MEAN SCORES First Year N = 49 | Second Year N = 38 | Third Year N = 37 | F |
|---|---|---|---|---|---|
| 1. | Abasement | 3.9796 | 2.9737 | 3.7568 | 5.2663** |
| 2. | Achievement | 7.1633 | 7.2632 | 6.7568 | 1.5840 |
| 3. | Adaptability | 7.0000 | 7.1053 | 6.0270 | 4.9158** |
| 4. | Affiliation | 6.7551 | 7.3158 | 6.7297 | 1.8590 |
| 5. | Aggression | 2.2041 | 2.3684 | 2.4595 | 0.3095 |
| 6. | Change | 5.4490 | 6.5000* | 5.4324 | 5.8983** |
| 7. | Conjunctivity | 7.4082 | 7.7368 | 6.9189 | 2.6152 |
| 8. | Counteraction | 5.7347 | 6.8684 | 6.2162 | 4.8369** |
| 9. | Deference | 5.7755 | 5.4737 | 4.9189 | 2.8681 |
| 10. | Dominance | 4.0000 | 3.9211 | 4.4595* | 0.9143 |
| 11. | Ego Achievement | 6.5714 | 6.8421 | 6.6757 | 0.2869 |
| 12. | Emotionality | 5.3876 | 6.5263 | 6.0811 | 4.2214* |
| 13. | Energy | 7.2041 | 7.3421 | 6.9459 | 0.6456 |
| 14. | Exhibitionism | 6.3469 | 7.5000 | 6.0541 | 9.2915** |
| 15. | Fantasied Achievement | 4.7551 | 5.0789 | 4.6216 | 0.7219 |
| 16 | Harm Avoidance | 7.2857 | 6.5526* | 7.1351 | 2.5742 |
| 17. | Humanities | 6.7143 | 6.7368 | 6.5676 | 0.1194 |
| 18. | Impulsiveness | 4.8571 | 6.3947** | 5.1892 | 9.9228** |
| 19. | Narcissism | 6.4286 | 5.2895 | 6.3514 | 7.2973** |
| 20. | Nurturance | 7.0408 | 7.3684 | 6.0541** | 6.7274** |
| 21. | Objectivity | 7.3265 | 8.2105 | 7.6757 | 2.3296 |
| 22. | Order | 4.7755 | 4.2632 | 4.8108 | 1.4864 |
| 23. | Play | 4.0816 | 4.7368* | 3.7027 | 5.1943** |
| 24. | Practicalness | 6.5102 | 6.1842 | 6.1622 | 1.1790 |
| 25. | Reflectiveness | 6.5306 | 6.4474 | 6.1081 | 0.5414 |
| 26. | Science | 6.0408 | 5.8947 | 5.1081 | 2.7890 |
| 27. | Sensuality | 6.2245 | 7.0000 | 5.7838 | 7.2560** |
| 28. | Sexuality | 2.8776 | 3.8158 | 3.1622 | 5.0627** |
| 29. | Supplication | 6.4490 | 7.2105 | 6.1351 | 4.7422* |
| 30. | Understanding | 6.0000 | 6.0263 | 5.2162 | 3.8351* |

*Mean score which differs significantly at the .05 level from national norms or F, with 2 and 121 degrees of freedom, significant at the .05 level with obtained value of 3.00 or greater.

**Mean score which differs significantly at the .01 level from national norms or F, with 2 and 121 degrees of freedom, significant at the .01 level with obtained value of 4.79 or greater.

TABLE VII (Continued)

EFFECTS OF LENGTH OF INVOLVEMENT IN THE IGE MODEL
ON TEACHER PERCEPTIONS OF SCHOOL CLIMATE

| FACTORS | MEAN SCORES | | | F |
|---|---|---|---|---|
| | First Year N = 49 | Second Year N = 38 | Third Year N = 37 | |
| First-Order Factors: | | | | |
| 1. Intellectual Climate | 54.6326 | 58.0263 | 51.5676 | 4.8435** |
| 2. Achievement Standards | 32.0612 | 34.8421 | 32.6757 | 3.0578* |
| 3. Practicalness | 13.5510 | 13.5526 | 12.2162* | 4.8641** |
| 4. Supportiveness | 62.0816 | 64.1316 | 59.9730 | 3.1849* |
| 5. Orderliness | 38.6735 | 36.4211 | 36.1622 | 3.2876* |
| 6. Impulse Control | 34.2449 | 28.6579** | 33.3513 | 14.8140** |
| Second-Order Factors: | | | | |
| 1. Development Press | 201.0000 | 207.9737 | 192.5946 | 4.2776* |
| 2. Control Press | 87.5510 | 75.7895 | 89.1081 | 8.3627** |

*Mean score which differs significantly at the .05 level from national norms or F, with 2 and 121 degrees of freedom, significant at the .05 level with obtained value of 3.00 or greater.

**Mean score which differs significantly at the .01 level from national norms or F, with 2 and 121 degrees of freedom, significant at the .01 level with obtained value of 4.79 or greater.

1. In the second year of implementation of an IGE program, teachers feel a lower press for Abasement than is present during the first year of implementation. While the press for abasement increases again during the third year of implementation, the third year does not differ significantly from either the first or second year of implementation in the reported press for abasement. This may be interpreted as indicating that during the second year of implementation, teachers in IGE schools feel a sense of certainty and self-confidence regarding the school; this feeling, however, seems to abate during the third year of implementation.

2. The tabled findings showing significant differences in the perceived press for Counteraction (a willingness to overcome difficulty or failure) reveal that the second year of implementation produces a press for Counteraction which is significantly different from that reported during the first year of implementation.

3. The tabled findings showing significant differences in the perceived press for Exhibitionism reveal that teachers in IGE schools which are in the second year of implementation are more visibly impressed with the program and exhibit greater pride about the IGE program than do teachers in either the first or third years of implementation.

4. Teachers in the second year of implementation of the IGE model report a climate in the building which is more impulsive or spontaneous than is the climate in buildings which are in the first or third years of implemenation.

5. Teachers in the second year of implementaion of the IGE model report a building climate which is more egotistical and self-centered than is the climate in buildings which are in the first or third year of implementation. (Narcissism)

6. Teachers in the third year of implementation report a building climate which is less supportive than the climate which is reported by either first or second year schools. The decline in Nurturance is significantly different for third year schools when perceptions are compared with those which appear in second year schools.

7. Second year teachers in an IGE model express a higher perception of Play, i.e., amusement and entertainment in the climate of the building. The difference is not significant when compared to teachers in the first year of implementation but is significant in comparison with perceptions of teachers in the third year of implementation of the IGE model.

8. Teachers in the second year of IGE implementation report a higher press for Sensuality in the building climate, i.e., a press for sensory stimulation and for esthetic experiences, than do teachers in either the first or third years of implementation. The differences in perception between teachers in the second year of implementation and teachers in the third year of implementation are statistically significant.

9. The scale for Sexuality yielded statistically significant differences in the perceptions of teachers in the first year of implementation when compared

with the perceptions of teachers in the second year of implementation. There is a marked decline in prudishness in the reported building climate.

10. Teachers in the second year of implementation do not significantly differ from teachers in the first year of implementation regarding the perceived press of Intellectual Climate. Teachers in the third year of implementation, however, differ significantly from teachers in the second year of implementation and report a lower press for Intellectual Climate.

11. Teachers in the first or third years of implementation do not differ in their perceptions of Impulse Control or Control Press. Second year teachers in an IGE model, however, differ from the other two groups of teachers and report a lower press for Impulse Control and a lower Control Press. The setting in IGE schools during the second year of implementation is evidently one which fosters the expression of personal viewpoints and greater openness for staff members.

When all of the above findings are considered, it is apparent that the obtained data reveal a definite pattern which occurs as an IGE model is implemented. While teacher perceptions of building climate do not, during any of the three years, differ significantly from national norms for school climate as measured by the Organizational Climate Index, variations do occur during the implementation of the model. By the second year of implementation, teachers in IGE schools express attitudes (and probably behaviors) which reflect self-confidence, a willingness to work to make the IGE model successful, a pride in their involvement, an openness and flexibility or spontaneity to events which occur in the building, a sense of cooperative commitment, a sense of pleasure in what is happening, a belief that they are doing a "better" job, and a willingness to express and experiment with the viewpoints which they hold, a pattern significantly different for teachers during the second year of implementation than that obtained for teachers during the first year of implementation. By the third year, however, the expressed staff perceptions of building climate are, for all practical purposes, identical to those expressed in the initial year of implementation.

Summary. After consideration of the findings presented in Table VII and in this chapter, the investigators chose to suspend judgment on the issue of whether or not the variations which occurred and were attributed to the length of involvement in the IGE Model represented a pattern for predicting the development of teacher perceptions of building climate. While there appears to be a significant movement from the first year to a more open climate in the second year, and then a return to essentially the same climate that existed in the first year of IGE implementation, in the third year there is a major limitation of this phase of the study which makes such a conclusion questionable. The limitation is that there were only six third year schools in the total population of IGE schools available to the researchers. In addition these third year schools did not have the same first year implementation strategy or in-service materials that the first and second year schools had.

Thus, the investigators can suggest two possible explanations for these findings. One, the rise and the fall of climate scores is due to the Hawthorne effect, or, two, the four third year schools participating in the study were not representative of third IGE schools, as the model is presently defined. Only further research efforts will resolve this question.

## CHAPTER V

This study was undertaken to investigate the following four major questions regarding teacher perceptions of climate in Individually Guided Education (IGE) schools:

1. If schools are categorized on the basis of the degree of implementation of the IGE Model, and if a forced dichotomy between upper and lower quartiles on the degree of implementation is created, are there significant differences in teacher perceptions of school climate between High and Low implementing schools? between High implementors and national norms for OCI climate? between Low implementors and national norms for OCI climate?

2. If the location of IGE schools is categorized into four classifications--rural, suburban, urban, and inner city--are there differences in teacher perceptions of school climate which are attributable to the location (type of community) where the school is situated?

3. Are there significant differences in teacher perceptions of school climate in IGE schools which are identifiable as a result of the length of time which has passed since the IGE Model was implemented?

4. To what extent do teacher perceptions of school climate in IGE schools differ from teacher perceptions of school climate in selected control schools?

The Organizational Climate Index (OCI) selected as the research tool for use in collecting the data of the study.

All schools which were identified as being IGE schools by /I/D/E/A/ and who had completed the November, 1972 self-assessment provided by /I/D/E/A/ formed the population of this study (N = 545 schools). Each school in the population was classified on the degree of implementation (first, second, third, and fourth quartile ranges) of IGE outcomes and on their community location (rural, suburban, urban, and inner city). From this population, three sub-samples were drawn. The first consisted of schools in the first and fourth quartiles of

implementation within each of the four types of community locations; the second consisted of schools in the first, second, and third year of IGE implementation; and, the third was a regional sample of IGE and non-IGE schools. Ninety percent of all schools sampled participated in the final collection of data. Due to the loss of non-IGE schools in the third sample, data from this sub-sample was not included in this report.

## Major Findings of the Study

The investigators had selected an alpha level of .01 for the reporting of major findings of this study. Within this criterion, the investigators found:

1. No significant difference in teacher perceptions of school climate when comparisons were made between the first and fourth quartiles of degree of implementation.

2. No significant difference in teacher perceptions of school climate in either the first or fourth quartiles of degree of implementation when obtained data was compared to national norms for the perception of school climate as measured by the Organizational Climate Index.

3. A significant increase in Development Press and a significant decrease in Control Press as the degree of implementation of the IGE Model increased in rural and inner city communities.

4. A significantly lower perception of Control Press for teachers in the second year of implementation of the IGE Model as compared to teachers in the first or third year of implementation.

The findings reported above have been limited to the major questions and to the basic dichotomy provided by the two second-order factors--Development Press and Control Press--of the Organizational Climate Index (OCI). Significant findings were obtained on the first-order factors and on the thirty scales of the OCI and have been discussed in Chapters II, III, and IV.

## Conclusions of the Study

From the major findings of the study and from the findings presented in earlier chapters, the investigators drew the following conclusions:

1. As the degree of implementation of the IGE Model increases, teacher perceptions of a climate which is more "open" and more productive of intellectual activities also increases.

2. The greatest changes in teacher perceptions of school climate occur as the degree of implementation increases in rural and inner city schools.

3. Changes in teacher perceptions of building climate which occur as the degree of implementation increases do not tend to result in production of a climate which is significantly different from national norms for building climate.

4. Changes which apparently occur as a result of the length of time which has passed since implementation of the IGE Model was started for a school represent an area in which judgement as to the meaning or implication of these findings should be suspended until additional data are available.

Discussion of the Findings and Conclusions of the Study

If a less conservative alpha level of .05 had been selected as the criterion for judgement, schools in each of the four types of community locations would have shown a significant increase in Development Press and a significant decrease in Control Press when comparisons were made between the first and fourth quartiles of the degree of implementation of the IGE Model. It appears that as the IGE Model is implemented within a school, there is a predictable "opening" of the climate and an increased fostering of intellectual and developmental activities within the building. For the schools which were involved in this study, however, the achievement of high implementation of the IGE Model resulted in the attainment of school climate, as perceived by teachers, which approximated national norms. To fully understand and interpret these findings, longitudinally constructed studies would have to follow schools through a sequence of climate assessment which began before the implementation of the IGE Model was commenced and which stretched through a number of years of implementation activities. Such studies are one of the recommendations which the investigators would suggest for the future

assessment activities of /I/D/E/A/ and for schools which are considering the adoption of the IGE Model.

If changes in teacher perceptions of building climate were one of the intended outcomes in a decision to implement the IGE Model, further studies should be conducted to investigate more completely the findings of this study which suggest that the IGE Model is more appropriate for Inner City and Rural schools as contrasted to Suburban and Urban schools.

Consideration should be given to the inclusion of systematically collected teacher perceptions of climate (and parent and student perceptions of climate) as part of the model of implementation which is used in the adoption of IGE in buildings or districts. In accepting this recommendation, plans should be carefully formulated for the development of studies designed to compare teacher perceptions in both IGE and non-IGE schools.

Although the investigators decided, in this study, to suspend judgment on the question of whether or not changes in teacher perceptions of climate regress as the length of involvement in the implementation of the IGE Model is extended, studies should be planned and undertaken to assess the degree to which outcomes obtained by the IGE Model are the result of the Hawthorne effect.

## Summary

As an exploratory study designed to investigate a number of questions about the relationship between teacher perceptions of building climate and the utilization of the IGE Model, the findings and conclusions of this study suggest that positive results are obtained by the implementation of the IGE Model--if an increase in climate which stresses intellectual endeavors, achievement, respect for others, and increased interpersonal interaction is an intended outcome. While further studies are needed to more accurately delineate the relationships between

teacher perceptions of building climate and the implementation of the IGE Model, the preliminary results suggest that the implementation of the IGE Model does, in the eyes of teachers, lead toward the types of outcomes which are stressed by the model. And that, after all, remains the best test of program accountability--the ability to deliver on promises which are made or implied.

BIBLIOGRAPHY

Cornell, Francis G. "Socially Perceptive Administration," Phi Delta Kappan, Volume XXXVI, March, 1955.

Halpin, Andrew W. Theory and Research in Administration, New York: The MacMillan Company, 1966.

Kelley, Edgar A. Case Studies and An Analysis of the Role of Morale, Organizational Climate, and Conflict in the Study of Secondary School Environments. Unpublished doctoral dissertation, Michigan State University, 1970.

Mitchell, James V., Jr. "Studying High School Learning Environments, Student Needs, and Their Implications for Behavior," Michigan Journal of Secondary Education, Summer, 1970.

Owens, Robert G. Organizational Behavior in Schools, Englewood Cliffs, New Jersey: Prentice-Hall, 1970.

Stern, George G. People in Context. New York: John Wiley and Sons, 1970.

# APPENDIX A

APPENDIX A

Instructional Outcomes

1. All staff members have had an opportunity to examine their own goals and the IGE outcomes before a decision is made to participate in the program.

2. The school district has approved the school staff's decision to implement the I/D/E/A Change Program for Individually Guided Education.

3. The entire school is organized into Learning Communities with each Learning Community composed of students, teachers, aides, and a Learning Community leader.

4. Each Learning Community is comprised of approximately equal numbers of all age groups in the school. (ages 10-19)

5. Each Learning Community contains a cross section of staff.

6. Sufficient time is provided for Learning Community staff members to meet.

7. Learning Community members select broad educational goals to be emphasized by the Learning Community.

8. Role specialization and a division of labor among teachers are characteristics of the Learning Community activities of planning, implementing and assessing.

9. Each student learning program is based on specified learning objectives.

10. A variety of learning activities using different media and modes are used when building learning programs.

11. Student learning takes place with Learning Community members except when special resources are required.

12. The staff and students use special resources from the community in learning programs.

13. Learning Community members make decisions regarding the arrangements of time, facilities, materials, staff, and students within the Learning Community.

14. Students and teachers are involved in continuous assessment of learning programs using a variety of techniques.

15. The following are considered when students are matched to learning activities:
    - Peer relationships
    - Achievement
    - Learning styles
    - Interest in subject areas
    - Self-concept

16. Each student has an advisor whom he or she views as a warm, supportive person concerned with enhancing the student's self concept; the advisor shares accountability with the student for the student's learning program.

17. Each student (individually, with other students, with staff members, and with his or her parents) plans and evaluates his or her own progress toward educational goals.

18. Each student accepts increasing responsibility for selection of his or her learning objectives.

19. Each student accepts increasing responsibility for the selection or development of learning activities for specific learning objectives.

20. Each student can state learning objectives for the learning activities in which she or he is engaged.

21. Each student demonstrates increasing responsibility for pursuing her or his learning program.

22. There is a systematic method of gathering and using all information about a student which affects his or her learning.

Self-Improvement Outcomes

23. The school is a member of a League of schools implementing processes and participating in an interchange of personnel to identify and alleviate problems within the League schools.

24. The school as a member of a League of IGE schools stimulates an interchange of solutions to existing educational problems plus serving as a source of ideas for new development.

25. Staff members are responsive to one another's needs, trust one another's motives and abilities, and have developed the techniques of open communication, thereby leading to an effective working relationship.

26. The Program Improvement Council analyzes and improves its operations as a functioning group.

27. The Program Improvement Council assures continuity of educational goals and learning objectives throughout the school and assures that they are consistent with the broad goals of the school system.

28. The Program Improvement Council formulates school-wide policies and operational procedures and resolves problems referred to it involving two or more Learning Communities.

29. Students are involved in decision-making regarding school-wide activities and policies.

30. The Program Improvement Council coordinates school-wide inservice programs for the total staff.

31. Open communication exists between parents, students, staff, and the community.

32. The Learning Community analyzes and improves its operations as a functioning group.

33. Teacher performance in the learning environment is constructively critiqued by members of the Learning Community using both formal and informal methods.

34. Decisions regarding the planning of learning programs for the Learning Community in general and for individual students are constructively critiqued by members of the Learning Community.

35. A personalized inservice program is developed and implemented for each Learning Community staff member.

# APPENDIX B

# DEFINITIONS FOR THE THIRTY SCALES OF THE SYRACUSE INDEXES*

## Introduction

In developing each of the Syracuse Indexes, George Stern and his associates used a pool of hundreds of questions. In the development and refinement stages of instrument construction, ten questions were identified as most accurately providing information about each of the thirty personality scales identified by Henry Murray in his 1938 book, Explorations in Personality. Each of the Syracuse Indexes consists of 300 questions which provide information about the same thirty scales of human personality and behavior. The definition and interpretation of each scale is constant regardless of which instrument is used. Thus, the definitions which appear below are appropriate for interpretation of score results for the Organizational Climate Index (OCI)--the instrument employed in this study, the Classroom Environment Index (CEI), the High School Characteristics Index (HSCI), and all of the other Syracuse Indexes which have been developed.

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*The definitions of the thirty scales are based upon the definitions provided by Stern, People in Context, Appendix A, pp. 315-362.

## Scale Definitions

1. ABASEMENT-ASSURANCE

A positive score reflects feelings of self-depreciation and self-devaluation. There is a ready acknowledgement of inadequacy, ineptitude, or inferiority and acceptance of humiliation or other forms of self-degradation.

A negative score reflects feelings of certainty, self-confidence, or self-glorification.

2. ACHIEVEMENT

A positive score indicates feelings of being able to surmount obstacles, attain a successful conclusion to problems, or prove one's worth. It also reflects the presence of motivation for attaining success through personal efforts.

A negative score indicates feelings of being unable to overcome obstacles or solve problems. It may also reflect an attitude which credits success to the efforts of others rather than to the efforts of the individual.

3. ADAPTABILITY-DEFENSIVENESS

A positive score indicates an ability to accept criticism, advice, or humiliation.

A negative score indicates resistance to suggestion, guidance, direction, or advice. Failures are concealed or justified through rationalizations.

4. AFFILIATION

A positive score indicates the presence of gregarious behaviors. Interactions with others are friendly, participatory, and group-centered.

A negative score indicates unsociable behaviors or behaviors which express social detachment, social independence, or self-isolation.

5. AGGRESSION-BLAME AVOIDANCE

A positive score indicates direct or indirect disregard and indifference for the feelings of others.

A negative score indicates the denial or inhibition of hostile feelings.

6. CHANGE-SAMENESS

A positive score indicates the presence of variable and flexible behavior.

A negative score indicates the presence of repetition and routine.

7. CONJUNCTIVITY-DISJUNCTIVITY

A positive score indicates the presence of organized, purposeful, planned activity patterns.

A negative score indicates behaviors which are uncoordinated, disorganized, diffuse, or self-indulgent.

8. COUNTERACTION

A positive score indicates a willingness to try to overcome difficulty, frustrating, humiliating, or embarassing experiences or failures.

A negative score is an indication of patterns of behavior which are characterized by avoidance or withdrawal from situations which are difficult, frustrating, humiliating, or embarassing.

9. DEFERENCE-RESTIVENESS

A positive score indicates a respect for authority and submission to the opinions and preferences of those individuals who are perceived as being superior.

A negative score indicates the presence of behaviors which are non-compliant, insubordiante, rebellious, resistant, or defiant.

10. DOMINANCE-TOLERANCE

A positive score indicates the presence of behaviors which seek to gain ascendancy over others by means of assertive or manipulative control.

A negative score indicates the presence of behaviors of nonintervention, forbearance, acceptance, equalitarianism, permissiveness, humility, or meekness.

11. EGO ACHIEVEMENT

A positive score indicates an interest in idealistic social action; the individual has an active or fantasied realization of dominance, power, or influence to be achieved through activities of social improvement or reform.

A negative score indicates the absence of individual motivation in social action.

12. EMOTIONALITY-PLACIDITY

A positive score indicates intense, open, expressive behaviors.

A negative score indicates passive, restrained, controlled, or constricted behaviors.

13. ENERGY-PASSIVITY

A positive score indicates the presence of an intense, sustained, vigorous activity level.

A negative score indicates sluggishness or inertia in the activity level.

14. EXHIBITIONISM-INFERIORITY AVOIDANCE

A positive score indicates the presence of attention-seeking behaviors.

A negative score indicates the presence of behaviors which illustrate shyness, embarassment, self-consciousness, or withdrawal from situations in which the attention of others might be attracted.

15. FANTASIED ACHIEVEMENT

A positive score indicates the individual's interest or motivation for fame, public recognition, personal distinction, or power.

A negative score indicates a lack of motivation for fame, public recognition, personal distinction, or power.

16. HARM AVOIDANCE-RISKTAKING

A positive score indicates behaviors of fearfulness, avoidance, withdrawal, or excessive caution.

A negative score indicates boldness, venturesomeness, thrill-seeking.

17. HUMANITIES-SOCIAL SCIENCES

A positive score indicates an interest in, and an ability to manipulate, symbols which represent social objects or artifacts. Behaviors which stress empirical analysis, reflection, discussion, and critical thinking are demonstrated.

A negative score indicates a disinterest in behaviors of empirical analysis, reflection, discussion, or critical thinking.

18. IMPULSIVENESS-DELIBERATION

A positive score indicates rash, impetuous, impulsive, or spontaneous behavior.

A negative score indicates behaviors of care, caution, and reflectiveness.

19. NARCISSISM

A positive score indicates a vain, egotistical, self-centered preoccupation.

A negative score indicates the lack of excessive preoccupation with oneself.

20. NURTURANCE

A positive score indicates behaviors which are supportive of others through love, assistance, or protection.

A negative score indicates behaviors which seek disassociation from others or are indifferent to others. Support, friendship, or affection are withheld.

21. OBJECTIVITY-PROJECTIVITY

A positive score indicates the use of thinking patterns which are detached, rational, nonmagical, and impersonal.

A negative score indicates patterns of thinking which are autistic, paranoid, irrational, egocentric, or suspicious.

22. ORDER-DISORDER

A positive score indicates a preoccupation with neatness, orderliness, arrangement, and meticulous attention to detail with a compulsive organization of the immediate physical environment.

A negative score indicates the presence of habitual disorder, confusion, disarray, or carelessness.

23. PLAY-WORK

A positive score indicates the presence of behaviors which are pleasure-seeking and which demonstrate a sustained pursuit of amusement and entertainment.

A negative score indicates persistent or consistent behaviors which are purposeful, serious, and task-oriented.

24. PRACTICALNESS-IMPRACTICALNESS

A positive score indicates the presence of behaviors which are useful, tangibly productive, businesslike applications of skill or experience.

A negative score indicates behaviors or attitudes which are speculative, theoretical, whimsical, or indifferent to practical affairs.

25. REFLECTIVENESS

A positive score indicates the presence of behaviors or an environment which stresses contemplation, intraception, introspection, or the presence of a preoccupation with private psychological, spiritual, esthetic, or metaphysical experiences.

A negative score indicates the lack of contemplative or introspective behaviors.

26. SCIENCE

A positive score indicates the use of symbolic manipulation of physical objects through empirical analysis, reflection, discussion, or criticism.

A negative score indicates a lack of attention to the symbolic manipulation of physical objects through processes of critical thinking.

27. SENSUALITY-PURITANISM

A positive score indicates a preoccupation with sensory stimulation and esthetic experiences or with gratification, hedonism, and voluptuousness.

A negative score indicates behaviors of austerity, self-denial, abstinence, frugality, or self-abnegation.

28. SEXUALITY-PRUDISHNESS

A positive score indicates erotic heterosexual interest or activity.

A negative score indicates the denial of heterosexual interest, prudishness, priggishness, or asceticism.

29. SUPPLICATION-AUTONOMY

A positive score indicates behaviors which express dependence on others for love, assistance, and protection.

A negative score reflects behaviors which stress detachment, independence, or self-reliance.

30. UNDERSTANDING

A positive score indicates an interest in intellectual activities such as problem-solving, critical analysis, theoretical speculation, and abstract thinking; this interest is based upon an assumption of the worthwhile value which is inherent in such activities.

A negative score indicates a lack of interest in intellectual activities as worthwhile activities for their inherent value.

## DEFINITIONS FOR THE FACTOR STRUCTURES OF THE SYRACUSE INDEXES

### Introduction

As each of the Syracuse Indexes has been developed, each instrument has been factor-analyzed by use of a principle component equamax procedure. This permits the development of first and second order factors which combine the thirty scales in differing ways and thereby permit the identification of a small number of major categories. The number of first and second order factors derived varies according to the type of population for which the instrument is intended. The instrument used in this study, the Organizational Climate Index has six first-order factors and two second-order factors. The factor structures and their definitions for the Organizational Climate Index are given in the following pages. The definitions are based on those provided in People in Context (Stern, 1970).

## Factor Definitions for the Organizational Climate Index

### FIRST-ORDER FACTORS

1. INTELLECTUAL CLIMATE

A positive score indicates an interest in intellectual activity, social action, and personal effectiveness. Positive scores result from positive scores on the following scales: Humanities, Science, Reflectiveness, Understanding, Fantasied Achievement, Sensuality, Ego Achievement, Exhibitionism, and Change.

A negative score indicates a low interest, or a lack of interest, in intellectual activity or social action. A negative score also indicates aloofness or withdrawal from situations requiring personal interaction and effectiveness.

2. ACHIEVEMENT STANDARDS

A positive score reflects behaviors which stress hard work and perseverance as demonstrated in a day-by-day commitment to institutional purposes. This factor is a result of high scores on the following scales: Counteraction, Energy, Achievement, Emotionality, and Ego Achievement.

A negative score indicates the lack of behaviors which stress any sustained effort or sense of purpose.

3. PRACTICALNESS

A positive score on this factor reflects an environment which stresses practical concerns in a friendly atmosphere; it implies the presence of assistance in demonstrating behaviors of useful applications of skill or experience. Positive scores on the scales of Practicalness and Nurturance are the basis for high scores on this factor.

A negative score indicates an environment in which indifferent attention is given to the practical application of experiences or skills.

4. SUPPORTIVENESS

A positive score indicates an environment in which the integrity of the individual is respected; yet, the atmosphere is one which fosters an attitude of democratic paternalism rather than individual independence. The following scales define this factor: Assurance, Tolerance, Objectivity, Affiliation, Conjunctivity, Supplication, Blame Avoidance, Harm Avoidance and Nurturance.

A negative score indicates an environment in which the individual has an autonomous and disassociated relationship with others.

5. ORDERLINESS

A positive score on this factor illustrates a concern for organizational structure, procedural orderliness, and respect for authority. A high score on this factor probably reflects conformity to community pressures and an effort to maintain a "proper" institutional image. The scales which identify this factor are: Order, Narcissism, Adaptability, Conjunctivity, Deference, and Harm Avoidance.

A negative score on this factor indicates impulsive or disorganized behaviors and the presence of confusion regarding the institutional purpose or image.

6. IMPULSE CONTROL

A positive score on this factor indicates a high level of organizational constraint and restrictiveness; there is little opportunity for personal expression or impulsive behavior in the individual's interaction with the organizational environment. The scales which define this factor are: Work, Prudishness, Blame Avoidance, Deliberation, Placidity, and Non-exhibitionism.

A negative score on this factor describes an organizational setting which is open to expressions of personal viewpoints and a setting in which a high press for constraint is not felt by teachers.

SECOND-ORDER FACTORS

1. DEVELOPMENT PRESS

A positive score reflects an institutional environment or profile which stresses development. The key factor contributing to Development Press is the Intellectual Climate factor. Also of importance, in varying degrees, are the first-order factors of Achievement Standards, Practicalness, Supportiveness, and some of the loadings from Orderliness.

A negative score indicates a low perception of development press.

2. CONTROL PRESS

A positive score is a result of loadings from the first-order factors of Orderliness and Impulse Control; it indicates organizational constraint and an emphasis upon proper procedure in a "closed" environment.

A negative score is an indication of a more "open" climate in which greater attention is given to flexible and personal behaviors than is given to the maintainance of "proper" procedure.

APPENDIX C

SAMPLE SCHOOLS PROVIDING CLIMATE DATA BY
LOCATION AND HIGH AND LOW IMPLEMENTATION

School and Intermediate Agency

Adams Elementary
Wisconsin Department of Public Instruction, Madison, Wisconsin.

Alice Birney Elementary
State Department of Education, Columbia, South Carolina.

Bird School
Des Moines, Iowa.

Brodhead Elementary
Wisconsin Department of Public Instruction, Madison, Wisconsin.

Bonsall Elementary
State Department of Education, Trenton, New Jersey.

Buffalo Lake Elementary
Southwest Minnesota State College, Marshall, Minnesota.

Burnet Hill School
State Department of Education, Trenton, New Jersey.

Camden Elementary
South Carolina Department of Education, Columbia, South Carolina.

Christ the King School
Archdiocese of Omaha, Nebraska.

Dearington Elementary
Lynchburgh Public Schools, Virginia.

Edison Elementary
Wayne-Westland, Wayne, Michigan.

Flocktown Road Elementary
State Department of Education, Trenton, New Jersey.

Gibsonton School
Hillsborough County, Tampa, Florida.

Grace A. Greene
Dayton, Ohio.

Heard Elementary
Bibb County Schools, Macon, Georgia.

Highland Park School
Kent State University, Kent, Ohio.

High and Low Implementation (continued)

Honea Path Elementary

Linkhorne Elementary School
Lynchburg Public Schools, Virginia.

Longfellow
Dayton, Ohio.

McLeod Elementary
Jackson Public Schools, Jackson, Mississippi.

Miami Chapel
Dayton, Ohio.

Miller Elementary
Wisconsin Department of Public Instruction, Madison, Wisconsin.

Mineral King School
Tu re County, Visalia, California.

Nash School
Des Moines, Iowa.

Park Elementary School
Colorado Department of Education, Denver, Colorado.

Pepperell Elementary
Auburn University, Auburn, Alabama.

Perrymont Elementary
Lynchburg Public Schools, Virginia.

Rivelon Elementary
State Department of Education, Columbia, South Carolina.

Rosevelt Elementary
Vasilia, California.

Sharon Elementary
South Carolina Department of Education, Columbia, South Carolina.

Thomas Paine School
State Department of Education, Trenton, New Jersey.

Tullar Elementary
Wisconsin Department of Public Instruction, Madison, Wisconsin.

Village South Elementary School
Wright University, Dayton, Ohio.

High and Low Implementation (continued)

Wagener Elementary
State Department of Education, Columbia, South Carolina.

Washington Elementary
Southwest Minnesota State College, Marshall, Minnesota.

Weaver
Dayton, Ohio.

SAMPLE SCHOOLS PROVIDING CLIMATE DATA BY
NUMBER OF YEARS IN THE IGE

Schools and Intermediate Agencies

Edison School
Dayton, Ohio.

Madison Elementary
Wisconsin Department of Public Instruction, Madison, Wisconsin.

McFarland Elementary
Wisconsin Department of Public Instruction, Madison, Wisconsin.

Montgomery Elementary
Austin, Texas.

North View Elementary
Wisconsin Department of Public Instruction, Madison, Wisconsin.

Robles School
Hillsborough County, Tampa, Florida.

Shady Lane Elementary
Wisconsin Department of Public Instruction, Madison, Wisconsin.

St. Mary's School
O'Neill, Nebraska.

St. Patrick School
Cedar Rapids, Iowa.

Studebaker Elementary
Des Moines, Iowa.

Tigerton Elementary
Tigerton, Wisconsin.

Tullar Elementary
Wisconsin Department of Public Instruction, Madison, Wisconsin.

Van Cleve School
Dayton, Ohio.

Villard Elementary
Villard, Minnesota.

APPENDIX D

THE UNIVERSITY OF NEBRASKA-LINCOLN
LINCOLN, NEBRASKA 68508

TEACHERS COLLEGE
DEPARTMENT OF
SECONDARY EDUCATION

Dear Principal:

By now your league facilitator has informed you of your selection as part of a nation-wide study to assess the climate in IGE schools. The enclosed material provides you with information concerning the procedures that should be used to collect data from your teaching staff. Twenty-five to forty minutes of each teacher's time will be required. Teachers should be informed that all questions refer to their building.

While the directions suggest a group administration, you may wish to hold a brief staff meeting to distribute the instruments and fill out the information described in the directions and then give your teachers overnight to complete the instrument. It is essential that the completed forms be returned to you within twenty-four hours.

We realize how busy you and your staff are at this time of year. However, the data obtained from this study is essential to the continued development and improvement of IGE programs. Please help us.

Should you have any questions concerning the study or procedures, feel free to call us collect (402-472-3151) or contact your league facilitator. Since we must also mail the enclosed instruments to one other school, your earliest responses will be appreciated.

Thank you for your help.

Sincerely yours,

Edgar A. Kelley
Assistant Professor

Fred H. Wood
Associate Professor

FHW/EAK/ls

CODE NUMBER_____

I/D/E/A Study of Teacher Perceptions of Climate in Selected IGE Schools
Spring, 1973
Investigators: Edgar A. Kelley, Ronald Joekel, Fred H. Wood
104 Henzlik Hall
University of Nebraska
Lincoln, Nebraska 68508 [402-472-3151]

SCHOOL: _____

_____

_____

_____

CENTER: _____

_____

CONTACT PERSON: _____

## DIRECTIONS FOR ADMINISTRATION OF THE ORGANIZATIONAL CLIMATE INDEX

1. Materials Checklist

   A. Sufficient Copies of the Organizational Climate Index (OCI).
   B. Sufficient Answer Sheets for Test Administration.
   C. Sufficient Pencils (2-1/2 or softer) for Use by Respondents.

2. Planning Checklist

   A. Have a room with adequate lighting.
   B. Plan adequate time for test administration. One hour will be sufficient; most will finish within 35-40 minutes.
   C. Be certain teachers are notified and plan for participation in the test administration.
   D. Have materials identified in the materials checklist available in the room.

3. Steps to Follow at the Beginning of the Test Administration Period

   A. Distribute test booklets, answer sheets, and pencils.
   B. Be certain that those taking the test are teachers (defined for purposes of the study as being professional staff members who spend more than one-half of their time in direct instructional duties.)

C. Have all persons taking the test count off in a 1,2, 1,2, 1,2. . . pattern until they are divided into two equal groups. [If an uneven number of persons are present, exclude one person from the study.]

D. All persons who are numbered "1" will complete the first 150 items of the answer sheet. All persons who are numbered "2" will complete Questions 151-300 on the answer sheet. Have participants open their test booklets to the appropriate starting point. Be certain to remind participants that each answer must be placed in the corresponding numbered answer space on the answer sheet; also remind them that the answer blocks on the answer sheet are arranged horizontally rather than vertically.

E. Before participants begin to answer the items of the OCI, the following information should be placed upon the answer sheet:

(1) In the lower right hand corner of the answer sheet, in the box marked "Index Identification", the letters "OCI" should be written in and the corresponding answer space should be darkened with a pencil. Participants should also darken the correct space to indicate their sex.

(2) In the "Other Coded Data" box, participants should write in the following numbers from left to right and should darken the appropriate spaces. The six spaces in this box should be filled in according to the following directions:

Space 1: All participants will write in the number _____.

Space 2. All participants will write in the number _____.

Space 3. All participants will write in the number _____.

Space 4. Select from the following code list.

1 = B. A.
2 = M. A.
3 = Post-M. A.

Space 5: Select from the following code list.

1 = In first, second, or third year of teaching career.
2 = In fourth, fifth, or sixth year of teaching career.
3 = More than six years of teaching experience.

Space 6: Grade Level in Which you have Major duties.

K = 0
1 = 1
2 = 2
3 = 3
4 = 4
5 = 5
6 = 6